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ROYAL GARDENS, KEW.

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NEW GARDEN PLANTS.

The *Kew Bulletin* for April 1888 contained a list of new garden plants described to the end of the year 1887. The present list includes those described and published during the year 1888. It has been extended to include the descriptions of new plants (and name alterations) which have appeared in several horticultural periodicals, that were not included in the former list. The number of new garden plants annually described in various English and foreign periodicals, renders it a matter of considerable difficulty to botanists and horticulturists to keep them in view. The compilation and publication of a complete annual list of new garden plants is indispensable to the maintenance of a correct nomenclature, especially in the smaller botanical establishments in correspondence with Kew, as these, for the most part, are only scantily provided with horticultural periodicals. Such a list will also afford information respecting new plants under cultivation at this establishment, many of which will be distributed from it in the regular course of exchange.

A full description of hybrids of garden origin, and of garden varieties, is not given, as otherwise the list would exceed the moderate limits within which it is necessary to confine it.

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The publications from which this list is compiled, with the abbreviations used to indicate them, are as follows :—*B. M.*—Botanical Magazine. *B. T. O.*—Bulletino della R. Società Toscana di Orticultura. *Bull. Cat.*—Bull, Catalogue of New, Beautiful, and Rare Plants. *G. C.*—Gardeners' Chronicle. *G. and F.*—Garden and Forest. *Gfl.*—Gartenflora. *H. G.*—Hamburgh Garten-und Blumenzeitung. *Ill. H.*—L'Illustration Horticole. *Jard.*—Le Jardin. *L.*—Lindenia. *L'Hort. Int. Cat.*—L'Horticulture Internationale, Catalogue des Plantes. *O.*—L'Orchidophile. *R.*—Reichenbachia. *R. H.*—Revue Horticole. *Veitch Cat.*—Veitch & Sons' Catalogue of Plants. *Veitch. Man.*—Veitch & Sons' Manual of Orchidaceous Plants. *W. G.*—Wiener Illustrirte Garten-Zeitung. *Williams Cat.*—Williams' New and General Plant Catalogue. *W. O. A.*—Warner & Williams' Orchid Album.

The abbreviations used in the descriptions of the plants are :—*Diam.*—Diameter. *Fl.*—Flower. *Fr.*—Fruit. *Ft.*—Foot or Feet. *G.*—Greenhouse. *H.*—Hardy. *H. H.*—Half-hardy. *In.*—Inches. *Infl.*—Inflorescence. *L.*—Leaves. *Lin.*—Line (one-twelfth of an inch). *Per.*—Perennial. *Pet.*—Petals. *S.*—Stove. *Sep.*—Sepals. *Shr.*—Shrub.

N.B.—Unless specified, all Orchids and Bromeliads may be considered to be stove epiphytes.

Abies excelsa, var. **mutabilis,** Veitch. (*W. G.* 1888, p. 107.) Coniferæ. Garden variety of **Picea excelsa.**

Abutilon chrysostephanum, var. **compactum.** (*W. G.* 1888, p. 123.) Malvaceæ. Garden variety.

Acæna adscendens, Vahl. (*B. T. O.* 1888, p. 331.) Rosaceæ. H. rockwork plant, with long creeping stems, giving off ascending branches. L. pinnate, leaflets ¼ to 1 in. long, obovate or elliptic-obovate, obtuse, toothed, glabrous above, silky beneath. Fl. heads globose, dark purple, on long peduncles. Patagonia.

Acæna ovina, A. Cunn. (*B. T. O.* 1888, p. 332.) H. similar to *A. ovalifolia,* R. and P., but a little larger and less graceful. The leaflets of the rather long pinnate l. are elliptic, obtuse, and pinnately cut to the middle, more or less pubescent on both sides, or glabrous above. Fl. in long interrupted spikes, purple. Australia.

Acæna sarmentosa, Carm. (*B. T. O.* 1888, p. 332.) H. per. A rampant species similar to *A. sanguisorbæ,* but stouter, with longer branches, and the leaves more silky beneath, and with longer hairs. Fl. in globose heads on tomentose peduncles of moderate length with one or two bracts. Tristan d'Acunha. [Perhaps the plant in cultivation is not correctly named, as it is said to come from South America. The above brief description is taken from dried specimens.—*N. E. B.*]

Acæna sericea, Jacq. (*B. T. O.* 1888, p. 332.) H. per. with rather long l., having but 3 to 5 pairs of cuneate, oblong, toothed leaflets, silky beneath. Fl. green in globose heads, on long peduncles, which also bear 2 or 3 smaller heads, sessile in the axils of leafy bracts. Patagonia, Chili. [*A. cuneata,* H. and A., is a synonym of this.—*N. E. B.*]

Acæna splendens, Hook. (*B. T. O.* 1888, p. 332.) H. alpine per. A stout tufted sp. L. pinnate, with 3–4 pairs of obovate or oblanceolate, toothed leaflets, densely silky white on both sides. Fl. in long interrupted spikes on long stout peduncles. Chili.

Acalypha triumphans, Lind. and Rod. (*Ill. H.* v. 35, p. 55, pl. 55 ; *L'Hort. Int. Cat.* 1888–9, p. 41 ; *H. G.* 1888, p. 502 ; and *W. G.* 1888, p. 384.) Euphorbiaceæ. S. shr. A good foliage plant, with large cordate, toothed, acute l., variegated with deep crimson, green, and brown. Solomon Isles. Seems to be a variety of **A. Wilkesiana.**

Acanthopanax spinosum, Miq. (*G. and F.* 1888, v. 1, p. 248.) Araliaceæ. H. shr. The accepted name for *Aralia pentaphylla.*

Acer platanoides, L. vars. **columnare, dilaceratum, euklorum, integrifolium, nanum** (syn. *pygmæum* of gardens), and **quadricolor,** of gardens. *H. G.* 1888, pp. 337–40.) Sapindaceæ. Garden varieties.

Adiantum colpodes, var. **roseum.** (*G. and F.* 1888, v. 1, p. 376.) Filices.

S. fern. A variety having the young fronds of a coppery-red hue.

Adiantum cuneatum, var. **Gordoni.** (*W. G.* 1888, p. 107.) Garden variety.

Adiantum reginæ. (*Veitch Cat.* 1888; *W. G.* 1888, p. 107.) A beautiful maiden-hair fern, approaching *A. Victoriæ* and *A. rhodophyllum*, with the habit of *A. scutum*.

Adiantum schizophyllum, Moore. (*L'Hort. Int. Cat.* 1888–9, p. 45.) Garden variety of **A. æmulum.**

Adiantum versaillense. (*G. and F.* 1888, v. 1, p. 376.) A crested form of **A. capillus-veneris.**

Aechmea Drakeana, André. (*R. H.* 1888, p. 401; *Gfl.* 1888, p. 650; and *W. G.* 1888, p. 432,) Bromeliaceæ. A handsome plant, with a rosette of about 12, spreading-recurved l., 1½ ft. or more long, 2–2½ in. broad, channelled down the face; apex obtuse, mucronate; margins with short, straight, distant spines, green, tinted with violet beneath; both sides finely lepidote. Fl.-stem 1½ ft. high, violaceous at the base, red above, and covered with a white tomentum, and furnished with pale, narrow bracts. Spike oblong, lax. Fl. sessile; calyx glabrous, bright rose; corolla 1½ in. long, bright blue. Ecuador.

Aeranthus. *See also* **Angræcum.**

Aeranthus Grandidierianus, Rchb. (*O.* 1888, p. 200; and *H. G.* 1888, p. 127.) Orchideæ. [A synonym of Angræcum Grandidierianum, Carr.—*N. E. B.*]

Aeranthus ophioplectron, Rchb. f. (*G. C.* 1888, v. 4, p. 91; and *H. G.* 1888, p. 398.) *See* **Angræcum ophioplectron,** Rchb. f.

Aeranthus trichoplectron, Rchb. f. (*G. C.* 1888, v. 3, p. 264; *H. G.* 1888, p. 226; and *O.* 1888, p. 161.) L. soft, linear, contracted at the bidentate; apex, 5 in. long, ⅓ in. broad. Fl. solitary, axillary, white, including the filiform spur, nearly 5 in. long. Sep. lanceolate, acute. Pet linear-acuminate. Lip broad, concave at base, acuminate at apex. Madagascar.

Aerides falcatum, var. **compactum.** Rchb. f. (*G. C.* 1888, v. 3, p. 744; and *H. G.* 1888, p. 370.) Orchideæ. A compact form, with very thick stems, short broad l., and short infl.

Aerides Picotianum. (*G. C.* 1888, v. 4, p. 378.) At the place quoted this plant is stated by Prof. Reichenbach to be the same as **A. Houlletianum,** Rchb. f.

Æsculus turbinata, Blume. (*R. H.* 1888, p. 496, p. 120–124; and *G. and F.* 1888, v. 1, p. 491.) Sapindaceæ. H. tree, resembling *Æ. hippocastanum* in general appearance, but distinguishable at sight by the l. being pale greyish beneath. Fl. white. Fr. globose-turbinate, without spines. Seeds about 2 in each fr., with a very large hilum. Japan. Cultivated under the name of *Æ. chinensis*.

Agave Baxteri, Baker. (*G C.* 1888, v. 3, p. 392; and *H. G.* 1888, p. 229.) Amaryllidaceæ. G. succulent. L. about 30 in a dense sessile rosette, about 12 in. long, 3 in. broad, glaucous; spines ⅛–⅓ in. long, brown, hooked. Fl.-stem 8–10 ft. high; panicle lax, the branches 3–4 in. long, with a dense cluster of yellowish fl. Mexico?

Aglaonema picta, var. **compacta,** Bull. (*Bull. Cat.* 1888, p. 7; *L'Hort. Int. Cat.* 1888–9, p. 46.) Araceæ. S. foliage plant of dwarf compact habit, with obliquely oblong-ovate, acuminate, dark green l. sparingly blotched with grey. Spathes pointed, shining green. Java.

Albuca Allenæ, Baker. (*G. C.* 1888, v. 3, p. 10; and *H. G.* 1888, p. 125.) Liliaceæ. S. bulb, allied to *A. Wakefieldii*. Bulb globose, 2 in. or more in diam. L. about 6, lanceolate, flaccid, glabrous, 1–1½ ft. long, 1½–2 in. broad. Fl.-stem, 3–4 ft. high. Raceme lax. Fl. about ¾ in. long, greenish-white, inner segments not convenient. Stamens sharply constricted above a quadrate base. Ovary trigonous; style subulate, stigma capitate. Zanzibar.

Allamanda magnifica, Williams. (*Williams' Cat.* 1888, p. 19.) Apocynaceæ. S., a fine free flowering climber, with clusters of clear yellow fl., with a deep orange-yellow throat, about 5 in. in diam. A variety of. *A. Schottii*.

Allium parciflorum, Viv. (*G. C.* 1888, v. 4, p. 236.) Liliaceæ. H., a small species, with an ovoid bulb, producing 1–3 slender stems, 4–10 in. high, bearing 2–4 slender filiform l., which are placed at from ⅓–½ way up the stem, and an umbel of 3–6 small purple fl. Corsica, Sardinia.

Alnus rhombifolia, Nutt. (*H. G.* 1888, p. 558.) H., an ornamental tree similar to *A. rubra*, but branches more slender, the dark brown bark scarcely dotted with white, and the nutlets with a thickened margin, not winged as in *A. rubra*. L. ovate or ovate-oblong, obtuse or acute, cuneate at the base, irregularly glandularly toothed, smooth above, slightly pubescent beneath, 2–3 in. long. California.

Alocasia Chantrieriana, Rodigas. (*Ill. H.* 1888, v. 35, p. 79, pl. 64.) Araceæ. Garden hybrid.

Alocasia gigas, Linden. (*L'Hort. Int. Cat.* 1889–9, p. 41.) S. per. No description or locality given.

Alocasia princeps, *Bull.* (*Bull. Cat.* 1888, p. 7; *L'Hort. Int. Cat.* 1888–9, p. 46.) S., an ornamental foliage plant. Petioles slender, greyish-green, marbled with chocolate-brown. Blade sagittate, the hind lobes narrow and spreading, with a triangular sinus, margins deeply sinuate. Upper surface metallic olive-green, darker along the midrib and veins; under surface greyish-green, with prominent, rounded, chocolate-brown veins. Malay Archipelago.

Aloe Hildebrandtii, Baker. (*B. M.* t. 6981; *G. C.* 1888, v. 3, p. 242; *H. G.* 1888, p. 181; and *R. H.* 1888, p. 479.) Liliaceæ. G. succulent. A distinct plant, with an erect, laxly, leafy stem; lanceolate-attenuate l. 6–10 in. long, $1\frac{1}{2}$–2 in. broad, of a glaucous green marked with a few white spots, and spiny on the margins; and large branching panicles of tubular fl. an inch long, laxly disposed. Outer perianth segments coral red, inner yellowish, with green keels. E. Trop. Africa.

Aloe longiflora, Baker. (*G. C.* 1888, v. 4, p. 756.) G. succulent. A large aloe, with a simple stem, bearing a lax rosette of tapering l., 15–18 in. long, $1\frac{1}{2}$ in. broad, glossy green, armed with numerous green prickles on the margin. Raceme simple, dense, 6–8 in. long. Bracts ovate, scarious, $\frac{1}{4}$ in. long. Pedicels about as long as the bracts. Fl. cylindrical, $1\frac{1}{2}$ in. long, pale yellow, tipped with green. Stamens, $\frac{1}{2}$ in. longer than the fl., with small red anthers.

Aloe penduliflora, Baker. (*G. C.* 1888, v. 4. p. 178; and *H. G.* 1888, p. 458.) G. succulent. A distinct plant, remarkable for the way in which the pendulous scape appears to arise from the base of the back of the lax, attenuate pale green l., which are flattish above, and have small marginal prickles. Raceme dense, turned up at the end of the pendulous scape. Fl. pale yellow. Zanzibar.

Alpinia officinarum, Hance. (*B. M.* t. 6995; *G. C.* 1888, v. 3, p. 592; *G. and F.* 1888, v. 1, p. 227; and *H. G.* 1888, pp. 311 and 328.) Scitamineæ. S. per. Rhizome stout, creeping, swollen at intervals. L. narrow lanceolate-acuminate. Scape terminal, erect, pubescent. Fl. sessile, white, veined on the lip with purple. Calyx campanulate, 2-lipped. Corolla-lobes linear-oblong obtuse, $\frac{3}{4}$ in. long. Lip elliptic-oblong obtuse, a little longer than the corolla. South China.

Amaranthus Margaritæ, Dam. (*W. G.* 1887, p. 433-4, f. 71.) Amaranthaceæ. N. annual. Garden variety.

Amaryllis Tettaui. (*Gfl.* 1888, p. 625.) Amaryllidaceæ. S. bulb. Garden variety.

Amelanchier alnifolia, Nutt. (*G. and F.* 1888, v. 1, p. 185, f. 34, and p. 202.) Rosaceæ. H. An ornamental shr., 6–8 ft. high, with broad elliptic-oblong l., very obtuse, and toothed at the apex; slightly cordate at base. Racemes short, fl. large. Fl. globose, $\frac{1}{4}$ in. in diam., dark purple. N. W. America.

Amelanchier oligocarpa, Roem. (*G. and F.* 1888, v. 1, pp. 245 and 247, f. 41.) H. A low bushy shr. 2–4 ft. high, with oblong, acute, crenulate, glabrous l., and white fl. $\frac{3}{4}$ in. in diam., on long pedicels, solitary or in pairs, rarely 3–4 in a raceme. Fl. dark blue-purple, obovate or shortly oblong. Eastern United States.

Anabasis ammodendron, C. A. Mey. (*W. G.* 1888, p. 37.) Chenopodiaceæ. H. shr., with leafless woody stems and an abundance of small yellow fl. Central Asia.

Angræcum. *See also* **Aeranthus.**

Angræcum ophioplectron, Rchb. f. (*G. C.* 1888, v. 4, p. 91.) Orchideæ. Allied to *A. Curnowianum.* Sep. 1 in. long, $\frac{1}{6}$ in. broad, narrow acuminate, spreading; pet. narrower, curved down behind the side sep. Lip triangular, acuminate, with a filiform spur 4 times as long as itself, twisted near the base. Fl. greenish yellow, with a white lip and ochre-reddish spur. Syn. *Aeranthus ophioplectron,* Rchb. f. Madagascar.

Angræcum Sanderianum, Rchb. f. (*G. C.* 1888, v. 3, pp. 168, 395; *G. and F.* 1888, p. 16; *H. G.* 1888, p, 178; and *R. H.* 1888, p. 516, with pl.) Allied to *A dependens.* Stem ascending. L. cuneate-oblong, about 4 in. long and $1\frac{1}{4}$–$1\frac{3}{4}$ in. broad, the apex unequally lobed. Pedicel with short tumid base not longer than the bract. Sep. triangular. Pet. and lip elliptic, apiculate. Spur slender, 3 times as long as the ovary ascending. Fl. white, $\frac{3}{4}$ in. in diam. Comoro Isles.

Angræcum tridactylites, Rolfe. (*G. C.* 1888, v. 4, p. 34; and *H. G.* 1888, p. 397.) Allied to *A. bicandatum.* Bulbs sub-compressed, with sub-acute angles $\frac{1}{4}$ in. broad. L. linear, 3–5 in. long, 5–8 lin. broad, unequally bidentate Racemes lateral, about 2 in. long

Fl. distichous, $\frac{1}{8}$ in. in diam., buff-coloured. Sep. and pet. ovate acute. Lip 3-lobed, with 2 fleshy marginal teeth at the base, the lateral lobes bristle-shaped, recurving. Sierra Leone.

Anguloa intermedia, Rolfe. (*G. C.* 1888, v. 3, p. 798; *H. G.* 1888, p. 396; and *L.* v. 4, p. 8.) Orchideæ. Garden hybrid.

Anguloa Ruckeri, var. **alba.** (*G. and F.* 1888, v. 1, p. 315.) A white-flowered variety.

Anhalonium Lewinii, Henn. (*Gfl.* 1888, p. 410–11, f. 92; and *H. G.* 1888, p. 461.) Cactaceæ. G. succulent. A small and very dwarf species about 2 in. in diam. The central part convex, and densely white-villous; the outer tubercles, in about 12 series, broadly polyhedric, glabrous, with a woolly tuft at their apex. Fl. small, pale rose, arising among the central tubercles; sep. in two series, acute; pet. about as long as the sep., very obtuse. Mexico. Not at present in cultivation.

Anoiganthus breviflorus, Baker. (*G. C.* 1888, v. 4, p. 411, misprinted Anigosanthus.) Amaryllidaceæ. G. bulb, with strap-shaped l., 1 ft. long by $\frac{3}{4}$ in. broad, and a scape about 9 in. long, bearing an umbel of several tubular, bright yellow fl., about an in. in diam. This is cultivated in some gardens under the erroneous name of *Cyrtanthus lutescens.* Natal.

Anoplophytum strictum, var. **Krameri,** André. (*R. H.* 1888, p, 350.) Bromeliaceæ. This is a species of *Tillandsia* resembling *T. stricta,* but the l. are longer, much more slender, and perhaps rather more scurfy. The bracts are deep rose, the calyx rosy-white, and the corolla white in the lower half, and clear violet in the upper half. Brazil. [Mr. Baker intends describing this in his handbook of Bromeliaceæ as a **Tillandsia**—*N. E. B.*]

Anthurium Chamberlaini, Masters. (*G. C.* 1888, v. 3, p. 462 and 464–5, f. 66, 67; *B. T. O.* 1888, p. 284; *G. and F.* 1888, v. 1, p. 168; *H. G.* 1888, p. 280; *Ill. H.* v. 35, p. 73, pl. 62; *R. H.* 1888, p. 194; and *W. G.* 1888, p. 201.) Araceæ. S. A large bold looking species, with large cordate l. 3 ft. long by 2 ft. broad, on petioles 3½–4 ft. long. Scape a ft. or more long. Spathe boat-shaped, erect, 8–9 in. long, 4 in. broad, pale dull puce coloured outside, shining crimson inside. Spadix 6 in. long, $\frac{3}{4}$ in. thick, on a stalk about $\frac{1}{2}$ in. long, dull reddish purple. Venezuela?

Anthurium Desmetianum, Rodigas. (*Ill. H.* v. 35, p. 47, pl. 52; *G. C.* 1888, v. 4, p. 302; *H. G.* 1888, p. 400; and *W. G.* 1888, p. 383.) Garden hybrid.

Anthurium isarense, André. (*R. H.* 1888, p. 423.) Garden hybrid.

Anthurium Kellermanni, of gardens. (*H. G.* 1888, p. 49.) Garden hybrid.

Anthurium Laingi, (*W. G.* 1888, p. 383.) Garden variety.

Anthurium Lawrenceanum, André. (*R. H.* 1888, p. 12, with pl.) Garden hybrid.

Anthurium longispathum, Carr. (*R. H.* 1888, p. 498; and *W. G.* 1888, p. 467.) S. An acaulescent species of vigorous growth. L. on long petioles, the bade 2 ft. long by 18 in. broad, thick and coriaceous, deeply cordate at the base, pale green, the veins very prominent beneath. Peduncle terete, grooved, stout, 3 ft. long. Spathe 15 in. long. Spadix very stout, cylindric, 2 ft. long. Guadeloupe.

Anthurium roseum. (*B. T. O.* 1888, p. 99.) Garden hybrid.

Anthurium Scherzerianum, var. **albolineatum.** (*W. G.* 1888, p. 278.) Garden variety.

—— Var. **nebulosum,** *Devansaye.* (*R. H.* 1888, p. 146.) Garden variety, with double white spathes dusted with red.

—— Var. **Waroqueanum, Rodigas.** (*Ill. H.* v. 35, p. 43, pl. 51; and *H. G.* 1888, p. 400.) This variety has white spaths spotted with red, and yellow spadices. [It does not appear to be distinct from the variety **Rothschildianum.** N. E Brown.]

Antigonon leptopus, var. **albiflora,** Damm. (*W. G.* 1888, p. 472.) Polygonaceæ. S. climber. A white-flowered variety.

Antirrhinum Nuttallianum, Bth. (*Gfl.* 1888, p. 331, t. 1275, f. 3; *G. C.* 1888, v. 3, p. 806; and *H. G.* 1888, p. 371.) Scrophulariaceæ. H. H. A rather slender branching plant 1–2 ft. high, softly pubescent and viscid. L. ovate, the lower about an in. long, the upper smaller and nearly sessile. Fl. axillary pedicillate, purple, the tube of the corolla not longer than the spreading lips. California.

Aphelandra amoena, Bull. (*Bull Cat.* 1888, p. 7; *L'Hort. Int. Cat.* 1888–9, p. 47.) Acanthaceæ. S. shr. A pretty foliage plant, with ovate acuminate l., of a deep green, variegated with silvery grey along the course of the midrib and veins. Brazil.

Aquilegia flabellata, var. **nana flore albo.** (*B. T. O.* 1888, p. 118, f. 17.) Ranunculaceæ. Garden variety.

Aquilegia longissima, A. Gray. (*G. and F.* 1888, v. 1, p. 31, f. 6, and p. 90.) H. per. A handsome columbine of tall habit, allied to *A. chrysantha*; slightly pubescent, with silky hairs. L. glaucous beneath. Fl. pale yellow, or straw colour, or nearly white, or tinged with red; spurs 4 in. or more long. Texas and Mexico.

Aquilegia Stuarti, André. (*R. H.* 1888, p. 539; and *H. G.* 1888, p. 552.) Garden hybrid.

Aralia cachemirica, Dene. **(cashimerica).** (*G. and F.* 1888, v. 1, p. 320; and *W. G.* 1888, p. 436.) Araliaceæ. H. A noble and stately herbaceous per., growing 6 ft. high, with very large compound l., the leaflets being 4–5 in. long, acuminate, hispidulous and serrate; the umbels of white fl. are disposed in a narrow terminal raceme 3–4 ft. long. Cashmere. [This is the same as **A. macrophylla,** Lindl., both names were published in 1844.—*N. E. B.*]

Arauja graveolens, Mast. (*G. C.* 1888, v. 4, p. 271, f. 33.) Asclepiadeæ, This is the plant known as *Schubertia grandiflora*, and S. *graveolens* or *Physianthus graveolens*, now referred to the genus *Arauja*.

Aristolochia Westlandi, Hemsley. (*B. M.* t. 7011; *G. C.* 1888, v. 3, p. 332, and v. 4, p. 186; and *H. G.* 1888, p. 459.) Aristolochiaceæ. S. Climber, very similar to *A. longifolia*, but with much larger fl. L. 6–10 in. long, narrow oblong-lanceolate, acuminate, cordate at base, glabrous above, pubescent beneath. Fl. pendent, peduncle 3–5 in. long, hairy, with brown hairs. Perianth tube bent on itself, limb roundish-ovate, about 6 in. long by 5 in. broad, greenish-yellow, reticulately veined with purple-brown. China.

Armeria undulata, Boiss. (*W. G.* 1888, p. 325.) Plumbagineæ. H. per. Something like the common Thrift, but the outer l. are linear-lanceolate and wavy on the edges, the inner l. being linear and entire. The fl. and bracts are white. Greece.

Arnebia cornuta, F. and M. (*G. and F.* 1888, v. 1, p. 6.) Boragineæ. H. A pretty annual, growing to 1½ ft. high, and 2 ft. in diam., with lanceolate, dark green, hairy, l., and racemes of deep yellow fl., with 5 black spots at the base of the lobes, which change to brown and finally disappear. Afghanistan.

Asarum macranthum, Hook. f. (*B. M.* f. 7022; *G. C.* 1888, v. 4, p. 416; and *H. G.* 1888, p. 553.) Aristolochiacæ. G. per. of dwarf habit. L. all radical; petioles 5–6 in. long; blade 3–4 in. long, and nearly as broad, cordate-ovate acute, green, clouded with yellowish-green, pale beneath, with purplish venation. Fl. numerous, densely crowded at the base of the l., 2–2½ in. in diam., brownish, with 3 large wavy lobes and a raised border around the mouth of the pear-shaped tube. The fl. are strongly scented like Fenugreek. Formosa.

Asclepias atrosanguinea aurea. (*G. and F.* 1881, v. 1, p. 356.) Asclepiadaceæ. G. or H. H. An ornamental plant, which seems to be a variety of *A. curassavica*, with deep blood-red fl. having a yellow corona. Bolivia.

Asparagus comorensis. (*W. G.* 1888, p. 158.) Liliaceæ. S. per. of vigorous climing habit, very useful for boquets, &c., surpassing the finest-cut ferns, with slender, emerald green foliage, somewhat like that of *A. plumosus*. Perhaps the same as *A. decumbens*.

Aspasia principissa, Rchb. f. (*G. C.* 1888, v. 3, p. 424; and *H. G.* 1888, p. 279.) Orchideæ. An interesting Orchid, with fl. like those of an *Odontoglossum*, 2 in. or more in expanse; sep. and pet. linear lanceolate, light green, with brown lines; lips broadly pandurate, with two parallel tubercles at the base, light buff.

Asphodelus Villarsi, Verlot. (*W. G.* 1888, p. 272.) H. per., resembling *A. ramosus*, but with rather larger fl., considered to be more showy. Europe.

Aspidium cristatum, var. **Clintonianum.** (*G. and F.* 1888, p. 342.) H. A strong-growing variety.

Aster alpinus, var. **speciosus,** Regel. (*Gfl.* 1888, p. 355, t. 1276, f. 1; and *H. G.* 1888, p. 401.) Compositæ. H. A robust variety, about 1½ ft. high, with very showy fl. 3 in. in diam., ray purple, disk yellow.

Aubrietia, Leichtlini. (*W. G.* 1888. p. 325 and see Gfl. 1886, p. 349.) Cruciferæ. H. per. A form with deep red fl.

Azaleastrum albiflorum. (*W. G.* 1888, p. 435.) Ericaceæ. A synonym of **Rhododendron albiflorum,** Hook.

Bahia confertiflora, D. C. (*Gfl.* 1888, p. 329, t. 1275, f. 1; *G. C.* 1888, v. 3, p. 806; and *H. G.* 1888, p. 371.) Compositæ. H. herbaceous per. of ornamental character, 12–18 in. high,

more or less woolly. L. small, cuneate, pinnately 5-7 lobed, lobes linear. Stems naked at the summit, terminated by small dense corymbose cymes, of yellow, radiate flower-heads. California.

Bambusa Veitchii, Carriere. (*R. H.* 1888, p. 90; *G. C.* 1888, v. 3, p. 332; and *W. G.* 1888, p. 161.) Gramineæ. H. A very ornamental dwarf Bamboo, with terete stems, and oblong acuminate l., 4–8 in. long, 1¼–2¼ in. broad, bright green above, bluish-green beneath, changing in autumn to yellow, or with a broad yellow border. Syn. *B. palmata.* Latour-Marliac. Japan. [This plant is **Bambusa tessellata,** Munro, and is also the same as *Arundinaria kurilensis* var. *paniculata,* Rupr. The infl. is a narrow panicle, on stems 1½–2 ft. long, or perhaps more, which bear sheaths but no l. The spikes are composed of 5–6, close set, 1-flowered spikelets, on the moderately short branches (2–2½ in. long) of the panicle. *N. E. B.*]

Begonia Bismarcki. (*Veitch Cat.* 1888, p. 10.) Begoniaceæ. Garden variety.

Begonia Clementinæ, Bruant. (*Ill. H.* v. 35, p. 11, pl. 39; and *H. G.* 1888, p. 232.) Garden hybrid.

Begonia Haageana. (*G. C.* 1888, v. 4, p. 49.) This is a garden name for **B. Scharffi.**

Begonia globosa, Heinemann. (*Gfl.* 1888, p. 645, f. 143.) Garden hybrid.

Begonia Lesoudsii, André. (*R. H.* 1888, p. 20, f. 5; *H. G.* 1888, p. 123; and *W. G.* 1888, p. 72.) Garden hybrid.

Begonia Scharffiana, Regel. (*Gfl.* 1888, p. 127, and p. 661, f. 146.) Also published as

Begonia Scharffi, Hook. f. (*B. M.* t. 7028; and *G. C.* 1888, v. 4, p. 670 and 695.) S. A handsome free-flowering species, 1½–2 ft. high, hispid with red hairs. L. 4–10 in. long, 2–5 in. broad, obliquely, cordate-ovate acuminate, purplish beneath. Fl. white, in large, long-stalked corymbs. Male fl. 2–2½ in. in diam., with two large elliptic seps. echinate with red bristles outside, and 2 narrow spathulate pet. Female fl. smaller, with equal obovate segments; ovary 3-winged, echinate, with red bristles. Syn. *B. Haageana,* of gardens. South Brazil.

Berberis aristata, var. **integrifolia,** (*W. G.* 1888, p. 108.) Berberidaceæ. H. shr. A variety without spines on the edge of the l.

Berberis Fendleri, Gray. (*G. and F.* 1888, v. 1, p. 460, and p. 462, f. 72.) H. Barbery, in the way of *B. vulgaris.* Stem and branches purplish, shining. Fl. in racemes 1–2 in. long, yellow, with some red bracts at the base of the calyx. Rocky Mountains.

Berberis Fremonti, Torr. (*G. and F.* 1888, v. 1, p. 496, f. 77.) H. evergreen shr. One of the *Mahonia* section. L. pinnate, leaflets in 2–3 pairs, oblong-lanceolate, with 2–3, large, spine-tipped teeth on each side. Racemes ascending, laxly few-flowered. Fr. dry and inflated when ripe. Texas, Arizona.

Berchemia racemosa, S. and Z. (*W. G.* 1888, p. 287.) Rhamnaceæ. H. climbing shr. with oblong, or oblong-ovate, subacute l., and terminal panicles of small fl., succeeded by dark brown berries. Japan, China.

Betula papyracea, var. **occidentalis,** Lyall. (*H. G.* 1888, p. 558.) Cupuliferæ. H. shr., said to differ from the typical form by its deciduous bark, and larger and thicker l., which are shining above. It comes true from seed. N. W. America.

Billbergia Krameriana, Wittm. (*Gfl.* 1888, p. 657.) Bromeliaceæ. Garden hybrid.

Biota orientalis, var. **laxenburgensis,** (*W. G.* 1888, p. 475.) Coniferæ. Garden variety.

Bollea hemixantha, Rchb. f. (*G. C.* 1888, v. 4, p. 206; and *H. G.* 1888, p. 458.) *See* **Zygopetalum hemixanthum,** Rchb. f

Bollea Wendlandiana. (*G. and F.* 1888, v. 1, p. 315.) *See* **Zygopetalum Wendlandi.**

Bouvardia luteola plena. (*W. G.* 1888, p. 157.) Rubiaceæ. Garden variety.

Brassia Keiliana, var. **tristis,** Rchb. f. (*W. O. A.* v. 8, pl. 347; and *G. C.* 1888, v. 4, p. 411.) Orchideæ. A variety with deep amber-brown sep. and pet., and a lemon-yellow lip with a semicircular series of brown spots at the base. Venezuela and Columbia.

Brocchinia cordylinoides, Baker. (*G. C.* 1888, v. 4, p. 474.) Bromeliaceæ. A large terrestrial Bromeliad with a trunk growing to 15 ft. in height, L. in a dense terminal rosette, 3–4 ft. long. 6–8 in. broad, green, and obscurely scurfy on both sides, margins without prickles. Infl. a large panicle, 6–8 ft. long, bearing innumerable, small, yellowish fl. British Guiana.

Brodiæa Bridgesii, S. Wats. (*G. and F.* 1888, v. 1, p. 125, f. 24.) Liliaceæ

A pretty G. bulb, with linear l., and an umbel of 10–20 funnel-shaped blue fl., 1–1¼ in. long. California.

Brodiæa Howellii, S. Wats. (*B. M.*, t. 6989; *G. C.*, 1888, v. 3, p. 466; *H. G.* 1888, p. 282; and *R. H.* 1888, p. 480.) H. H. bulb, with two, linear, channelled, bright green l., 10–12 in. long., and an umbel of 4–8 campanulate, white, or pale lilac fl., about ¾ in. in diam. Western United States.

Bulbophyllum Dearei, Veitch, *Veitch. Man. Dendrob.*, p. 95.) Orchideæ. This is *Sarcopodium Dearei*, now referred to **Bulbophyllum.**

Bulbophyllum oxyodon, Rchb. f. See **Megaclinium oxyodon,** Rchb. f.

Cæsalpinia japonica, S. and Z. (*G. C.* 1888, v. 4, p. 513, f. 73.) Leguminosæ. H. shr. of ornamental character, producing long shoots armed with hooked prickles, and bipinnate l., which are also prickly along the main petiode, the leaflets are oblong obtuse. Fl. it terminal racemes, bright yellow, about ¾ in. in diam. Japan.

Calandrinia oppositifolia, S. Wats. (*G. C.* 1888, 4, p. 601, f. 83.) Portulaceæ. H. per. herb, with tuberous rootstock; oblanceolate, fleshy l, 2–3 in. long., and a fl. stem 3–10 in. high, bearing a few handsome fl. over an in. in diam., either white, or blush-rose coloured; the pet. are 9–11 in number, and toothed at the apex. Oregon.

Calanthe Halli. (*W. G.* 1888, p. 108.) Orchideæ. Garden hybrid.

Calanthe striata, R. Br. (*B. M.* t. 7026; *G. C.* 1888, v. 3, p. 364, and v. 4, p. 573.) G. This is cultivated as *C. Sieboldii* The plicate l. are broadly lanceolate, acute, 6–10 in. long. Fl. stem 18 in. high; raceme lax. Fl. 1½ in. in diam. Sep. and pet. oblong acute, yellow outside, brownish inside. Lip, light yellow, deeply 3-lobed, the middle lobe being again shortly 2-lobed, and having 3 ridges which are raised into tubercles at their apex and near their base. Japan.

Calceolaria arachnoideo - crenatiflora. (*H. G.* 1888, p. 401.) Scrophulariaceæ. Garden hybrid.

Camassia Cusickii, S. Wats. (*G. and F.* 1888, v. 1, p. 172 and 174, f. 32.) Liliaceæ. H. A showy species with large clustered bulbs; glaucous, slightly wavy l., 1½–2 ft. long, 1½ in. broad, and a leafy fl. stem 2–3 ft. high, bearing a long, moderately dense raceme of very pale blue fl. 1½ in. in diam., with narrow oblanceolate obtuse segments. Oregon.

Campanula glomerata, var. **dahurica** (*W. G.* 1888, p. 283, f. 55.) Campunulaceæ. H. per. Seems to be only a dwarf, floriferous form.

Cassebeera triphylla, Kaulf. (*G. C.* 1888, v. 4, p. 501.) Filices, G. A compact little fern, about 4 in. high, with black-stalked trifoliolate fronds, the leaflets about 1½ in. long, and scarcely ¼ in. broad, crenulate, dark shining green. Sori in close rows along the margins. Brazil.

Cassia coquimbensis, Vogel. (*B. M.* t. 7002; *G. C.* 1888, v. 3, p. 722; *G. and F.* 1888, v. 1, p. 275; and *H. G.* 1888, p. 369.) Lequminosæ. S. A handsome shr. with pinnate l. and terminal corymbose racemes of bright yellow fl. 1–1½ in. in diam. L. 2–4 in. long; leaflets in 4–6 pairs, elliptic-oblong, mucronate. Upper pet. obcordate rather larger than the rest, which are obovate. Pods stipitate, 3–4 in. long, ½ in. broad, flattened. Chili.

Catalpa umbraculifera. (*B. T. O.* 1888, p. 330.) Bignoniaceæ. H. A handsome shr. or small tree 9–12 ft. high, with a rounded, compact head. No further description. China. Perhaps a garden variety.

Catasetum Bungerothi, var. **album.** Linden. (*L.* v. 4, p. 8.) Orchideæ. A variety with large pure white fl., with a delicate rose-coloured spot on the lip.

Catasetum decipiens, Rchb. f. (*L.* v. 3, p. 99, pl. 144.) A distinct looking plant with stout fusiform bulbs 3–4 in. long; lanceolate acute l., and a lax raceme of fl. about 1½ in. in diam. Sep. and pet. lanceolate acute, reddish-brown with darker-spots. Lip with a hemispherical sac, and a revolute margin, yellow outside, reddish-brown inside. Venezuela.

Catasetum Garnettianum, Rolfe. (*G. C.* 1888, v. 4, p. 692.) Allied to *C. barbatum*, but smaller. Bulbs 1–2 in. long, compressed-ovate or conical. L. lanceolate, 4 in. long, ½–¾ in. broad. Scape erect, as long as the l., several flowered. Fl. about 1¾ in. in diam. Sep. and pet. lanceolate-linear 10 lin. long, acute, light green, thickly spotted with chocolate-brown. Lip white, ¾ in. long, linear, divided into bristles at the apex, and with shorter bristles on the margins below the middle.

Catasetum pulchrum, N. E. Br. (*G. C.* 1888, v. 3, p. 10 and p. 235; *L.* v. 3, p. 51, pl. 120, and *O.* 1888, p. 260.) A pretty species with stout fusiform bulbs 4–6 in. long, ¾–1 in. thick, from the base of which spring short racemes of 5 or 6 fl. Sep. and pet. elliptic acute,

light green with chocolate bars. Lip oblong-saccate, obscurely 3-toothed at apex, deep yellow. Brazil.

Catasetum quornus. (*H. G.* 1888, p. 285.) A misprint for **C. gnomus,** Rchb. f.

Catasetum tapiriceps, Rchb. f. (*G. C.* 1888, v. 3, p. 136; *H. G.* 1888, p. 176; *L.* v. 3. p. 58; and *O.* 1888, p. 211.) Something in the way of *C. macroglossum.* Sep. green. Pet. brown. Lip orange, trigonous-saccate, with a free toothletted margin, the side lobes revolute, and the mid lobe with a transverse emarginate keel not far from the margin. Brazil.

Catasetum trulla, Ldl. var. **maculatissimum,** Rchb. f. (*G. C.* 1888, v. 3, p. 168; *H. G.* 1888, p. 178.) A variety having the pet. and lip spotted with brown, and the side lobes of the lip fringed.

Cattleya, aurea var. **marmorata,** O'Brien. (*G. C.* 1888, v. 4, p. 326.) Orchideæ. A grand variety with the yellow sep. and pet. marbled with dark rose. Lip violet-crimson in front, yellow, veined with purple on the basal half.

Cattleya bicolor, var. **Measuresiana,** Warn. and Will. (*W. O. A.* pl. 357.) A handsome variety, having the lip bordered with white. Brazil.

Cattleya Cassandra, Rolfe. (*G. C.* 1888, v. 4, p. 596.) Garden hybrid.

Cattleya citrino-intermedia, Rolfe. (*G. C.* 1888, v. 3, p. 73; *H. G.* 1888, p. 128; and *O.* 1888, p. 34.) Garden hybrid.

Cattleya flaveola, Rchb. f. (*G. C.* 1888, v. 4, p. 473; and *H. G.* 1888, p. 551.) Garden hybrid.

Cattleya Gaskelliana, var. **albens.** See **C. labiata Gaskelliana,** var. **albens.**

Cattleya Gibeziæ, Lind. and Rod. (*L.* v. 3, p. 77, pl. 133.) See **C. intermedia,** var. **Gibeziæ.**

Cattleya guatemalensis, var. **Wischhuseniana,** Rchb. f. (*G. C.* 1888, v. 4, p. 378; and *H. G.* 1888, p. 548.) A variety with light reddish-purple sep., rose-purple pet., and a brown lip with the disk yellow, and a white spot at the base. Panama.

Cattleya guttata, var. **munda,** Rchb. f. (*G. C.* 1888, v. 4, p. 378; and *H. G.* 1888, p. 549.) A variety with greenish, sep. without spots, changing to yellow.

Cattleya guttata Leopoldi, var. **odoratissima,** Rchb. f. (*G. C.* 1888, v. 4, p. 378; and *H. G.* 1888, p. 549.) A variety with Heliotrope-scented fl. Sep. and pet. yellow on both sides. Lip with purple front lobe and disk, and white side lobes.

Cattleya Harrisoniana, var. **Regnieriana,** Rchb. f. (*G. C.* 1888, v. 4, 264; and *H. G.* 1888, p. 503.) A variety with rather short sep. and pet. of a clear warm purple. Lip with the side lobes light purple outside, and light yellow inside, with a light purple border, the front lobe is very deeply plainted and minutely crenulate, and stands upright and hides the column, whitish yellow with an "orange callous basilar disc," purplish-tinted outside.

Cattleya intermedia, var. **Gibeziæ,** Lind. and Rod. (*L.* v. 3, p. 77, pl. 133; and *G. C.* 1883, v. 3, p. 806.) A variety with white fl., marked with 3-orange lines on the disk of the lip. Syn. *C. Giberziæ,* Lind. and Rod. Brazil.

Cattleya intermedia, var. **Parthenia,** Rchb. f. (*G. C.* 1888, v. 4, p. 178; and *H. G.* 1888, p. 458.) A form with elongated bulbs and white fl.

Cattleya Krameriana, Rich. f. (*G. C.* 1888, v. 4, p. 323; and *H. G.* 1888, p. 505.) Said to be a hybrid between *C. intermedia C. Forbesii,* raised in Brazil. Sep. and pet. rather narrow pale rose. Lip white, with two dark mauve-purple areas, and light purplish side lobes with rose-coloured borders; keels 5, rough, of a reddish hue.

Cattleya labiata Gaskelliana, var. **alba,** Rchb. f. (*G. C.* 1888, v. 4, p. 178; *H. G.* 1888, p. 458; and *W. O. A.* v. 8, pl. 353.) A white flowered variety with a yellow throat to the lip. Venezuela.

Cattleya labiata Gaskelliana, var. **albens,** Rchb. f, (*Gfl.* 1888, pp. 297, 545, t. 1274; *G. C.* 1888, v. 4. p. 122; and *H. G.* 1888, p. 371.) A variety with white fl. delicately tinted with lilac, and with a yellow disk to the lip, which is veined in the throat with orange-brown.

Cattleya labiata, var. **leucophœa.** (*W. G.* 1888, p. 109.) A shewy variety with delicate rosy-white sep and pet., the lip is lilac-shaded, striped with yellow in the throat, crisped on the margin.

Cattleya labiata, var. **magnifica,** Regel. (*Gfl.* 1888, p. 497, t. 1281, f. 1; and *H. G.* 1888, p. 501.) Fl. light rosy-purple, the front lobe of the lip dark purple, and the throat yellow.

Cattleya labiata Mossiæ, var. **Peetersii,** Rchb. f. (*G. C.* 1888, v. 4, p. 6; and *H. G.* 1888, p. 397.) This is the *C. Peetersii,* André, referred as a variety to *C. labiata.*

Cattleya labiata Percivaliana, var. bella, Rchb. f. (*G. C.* 1888, v. 3, p. 361; and *H. G.* 1888, p. 229.) A variety with bright purple fl. having the wavy sep., the pet., and front part of the lip, all spotted with dark purple.

Cattleya labiata Trianæi, var. Ernesti, Sander. (*R.* v. 1, p. 99, t. 43.) A variety with the sep. and pet. of a delicate blush tint, with the apex of the pet. blotched with purple. Lip purple with a darker purple disk, and the tube white with a large yellow blotch in front.

Cattleya labiata Warscewiczii rochellensis, Rchb. f., also named **C. rochellensis,** Rchb. f. (*G. C.* 1888, v. 4, p. 533.) A white variety, with a yellowish hue on the disk, and a faint purplish hue on the front part of the lip.

Cattleya Mossiæ, var. variabilis, Cherv. (*Jard.* 1888, p. 114, with fig.) An interesting form, in which the fl. are said to have been blue when they first opened, afterwards changing to mauve, and then to rose.

Cattleya velutina, var. Lietzei, Rgl. (*Gfl.* 1888, p. 49, t. 1265; and *G. C.* 1888, v. 3, p. 235.) A variety with narrow lanceolate acute sep., of a dusky orange, with a few purple dots; broader lanceolate, wavy pet., ochreous with purple dots; and a roundish-flabellate white lip, veined with purple. Brazil.

—— Var. **punctata,** Rgl. (*Gfl.* 1888, p. 51.) Fl. larger, the sep. and pet. thickly dotted with purple, and the front lobe of the lip margined with yellow. Brazil.

Cautleya lutea, Royle. (*B. M.* t. 6991; *R. H.* 1888, p. 480; and *G. C.* 1888, v. 3, p. 466, as *Cattleya lutea.*) Scitamineæ, S. per. This is the same as *Roscoea gracilis* Sm. and *R. lutea,* Royle, maintained as a distinct genus. N. W. Himalayes.

Ceanothus ovalis, Bigel. (*G. and F.* 1888, v. 1, p. 249.) Rhamanceæ. H. shr. 2–3 ft. high, of compact habit, with narrow, elliptic, obtuse or acute, crenulate l., and dense, corymbose umbels of white fl. Texas.

Cephaelis Bearii, Linden. (*H. G.* 1888, 571.) Rubiaceæ. S. shr. of no great beauty, with small inconspicuous umbels of fl. Mexico.

Chænactis tenuifolia, Nutt. (*Gfl.* 1888. p. 330, t. 1275, f. 2; *G. C.* 1888, v. 3, p. 806; and *H. G.* 1888, p. 371.) Compositæ. H. annual. A pretty herbaceous plant 9–15 in. high, leafy and branching. L. pinnately or bipinnately cut into narrow linear lobes. Heads corymbose, on short peduncles, yellow. California.

Chænomeles japonica, var. Semirenkiana, Semirenko. (*R. H.* 1888, p. 519.) Rosaceæ. H. shr. A garden sport of **Pyrus japonica,** with creamy l.

Chamæcyparis pisifera, var. casuarinifolia. (*W. G.* 1888, p. 477.) Coniferæ. Garden variety.

Chevalliera gigantea, P. Maury. (*Jard.* 1888, p. 8, with fig., and p. 71; and *R. H.* 1888, p. 370, f. 83.) Bromeliaceæ. A grand and very distinct species. L. 6½–9 ft. long, erect, slightly recurving at the acute apex, 2–3 in. broad, channelled down the face, glaucous green with black marginal spines. Fl. stem 18–20 in. long, stout, clothed with rose coloured bracts. Spike dense, about 4 in. thick. Fl. undescribed. Brazil.

Chionophila Jamesii, Benth. (*G. and F.* 1888, v. 1, p. 79, f. 15.) Scrophulariaceæ. H. alpine per. 4–5 in. high, glabrous, with thickish, entire, oblanceolate radical l., and scape like fl. stems, bearing 1–2 pairs of linear l., and a one-sided dense raceme of small, two-lipped, cream-coloured fl., bearded at the throat of the tube. Colorado.

Chorisia speciosa, St. Hil. (*Jard.* 1888, p. 270, with fig.) Malvaceæ. S. tree of ornamental character. L. on long petioles, digitate, leaflets 5–7, petiolulate, lanceolate acuminate, serrate. Fl. axillary, solitary, pedicillate; large and showy, 3 in. in diam. Calyx irregularly 2–4 lobed, glabrous and shining outside, silky inside. Pet. oblong obtuse, spreading, yellowish with dark brown rays at the base, densely pubescent on the back. Stamens in a long tube surrounding the style, with fertile anthers at the apex, and a whorl of barren anthers near the base. Brazil.

Chrysanthemum hæmatomma, Lowe. (*G. C.* 1888, v. 4, p. 36; and *W. G.* 1888, p. 341.) Compositæ. G. or H. H. suffrutescent species. L. 2–3 in. long, ¾–1 in. broad, pinnatisect, with about 3 pairs of oblong, obtuse, toothed lobes. Peduncles long and naked, bearing solitary fl.-heads 2–3½ in. in diam., with white or rosy rays, and a dark blood-purple disk. Madeira.

Chrysanthemum segetum, var. grandiflorum. (*W. G.* 1888, p. 246.) Garden variety.

Cissus mexicana, Prenger. (*B. T. O.* 1888, p. 298, f. 25.) Ampelideæ. H. H. or G. A species of vine, with tuberous rootstock and foliage similar to the ordinary grape vine. Mexico.

Cistus tauricus. (*H. G.* 1888, p. 558.) Cistaceæ. H. shr. A variety of **C. Creticus.**

Cleisostoma ringens, Rchb. f. (*G. C.* 1888, v. 4, p. 724.) Orchideæ. A pretty little species, with oblong emarginate l., 3–4 in long, 1½ in. broad, and a few flowered raceme of ochreous fl., having the middle lobe of the lip purple, and an orange spot on the side lobes. Sep. oblong, bluntly pointed; pet. narrower. Middle lobe of lip oblong, faintly warted, and with a large tubercle under the column; spur very large, broad, cylindrical, emarginate at the apex. Philippines.

Clematis coccinea, vars. **luteola,** André, and **parviflora,** Lavallée. (*R. H.* 1888, p. 348, with pl., and *H. G.* 1888, p. 462.) Ranunculaceæ. H. per. Var. **luteola** has the fl. yellow inside. Var. **parviflora** has smaller fl., reddish inside. Garden varieties.

Clematis mongolica. (*H. G.* 1888, p. 558.) H. Stated to be a very fine plant, with handsome yellow fl.

Clematis Pieroti, Miq. (*G. and F.* 1888, v. 1, p. 357.) H. climber, resembling *C. virginiana.* L. pinnate, with the leaflets deeply and sharply serrate, having prominent veins, and covered with appressed hairs. Fl. small white. Japan.

Clematis Sargenti, Laval. (*G. and F.* 1888, v. 1, p. 344.) H. A small-flowered form of **C. Pitcheri.** N. America.

Clerodendron cephalanthum, Oliver. (*G. C.* 1888, v. 3, p. 652.) Verbenaceæ. S. climber. A handsome plant, with brown stems, large ovate dark green l., the petioles of which harden and form stout hooks, and dense terminal heads of creamy-white fl. Calyx large, 5-lobed, purplish. Corolla with a narrow tube, 3–4 in. long, with spreading segments. Stamens much exserted. Zanzibar.

Clintonia Andrewsiana, Torr. (*G. C.* 1888, v. 3, p. 805.) Liliaceæ. H. per. with approximate, sessile, broadly ovate, glabrous l., resembling those of a *Colchicum,* and an erect scape about 2 ft. high, bearing an umbel of campanulate deep rose-coloured fl., on slender pedicels. California.

Clivia sulphurea, Laing. (*W. G.* 1888, p. 275.) Amaryllidaceæ. A garden form of **C. miniata.**

Cœlogyne graminifolia, Par. and Rchb. f. (*G. C.* 1888, v. 3, 168, and v. 4, p. 15; *B. M.,* t. 7006; *G. and F.* 1888, p. 300; and *H. G.* 1888, pp. 178 and 399.) L. 12–18 in. long, linear, leathery. Peduncles 4–5 in. long, 2–4 flowered. Sep. and pet. lanceolate, acute, white. Lip 3-lobed, side lobes white veined with brown, front lobe yellow tipped with white, the disk with 3 crisped keels, ending in brown lines. Burma.

Cœlogyne humilis, Lindl. var. **albata.** Rchb. f. (*G. C.* 1888, v. 3, p. 392, and *H. G.* 1888, p. 229.) A variety with white fl., having two orange spots and some radiating dotted lines on the lip.

Cœlogyne lactea, Rchb. f. (*G. C.* 1888, v. 3, p. 521, and *H. G.* 1888, p. 281.) Much in the way of *C. flaccida.* Bulbs short, tumid, wrinkled, and ribbed, shining. L. cuneate oblong, acute, thick, 7–8 in. long, 1–2 in wide. Fl. like those of C. flaccida, creamy-white, with an ochreous lip marked with brown veins on the side lobes and some bright yellow at the base of the front lobe. Burmah.

Convolvulus californicus, Choisy. (*W. G.* 1888, p. 472.) Convolvulaceæ. H.H. per. twiner, with long-stalked saggittate, light green l., and large white fl., with canary yellow throat, on long peduncles. California.

Convolvulus chrysorhizus, Forst. (*W. G.* 1888, p. 288.) S. A variety of **Ipomœa batatas,** Lam.

Cordyline indivisa, var. **Doucetiana.** (*Ill. H.,* v. 35, p. 15, pl. 40; *H. G.* 1888, p. 232; *G. C.* 1888, v. 3, p. 563; and *G. and F.* 1888, v. 1, p. 204.) Liliaceæ. G. shr. A variety having the l. edged and striped with white. Syn. *Dracæna indivisa* var. *Loucetiana.*

Cornus sibirica, var. **Gouchaulti,** Carr. (*R. H.* 1888, p. 519.) Cornaceæ. H. shr. Garden variety, with variegated l.

Corydalis tuberosa, D. C. var. **alba.** (*G. C.* 1888, v. 3, p. 556.) Papaveraceæ. H. per. This is the plant cultivated as *C. cava,* var. *alba C. bulbosa,* var. *alba and C. Marshalliana.* Fl. white. Europe.

Cosmos hybridus. (*G. and F.* 1888, v. 1, p. 474.) Compositæ. H. annual, very attractive, attaining 6–7 ft. in height, with finely-cut l., and white or pale rosy fl.-heads, about 2½ in. in diam., in large terminal corymbs. Mexico.

Cratagus mexicana, var. **Carrieri,** Mast. (*G. C.* 1888, v. 4, p. 736, f. 104.) Rosaceæ. This is the seedling form of *C. mexicana* described in Revue Horticole 1883, p. 108, as *C. Carrieri.*

Cratægus tomentosa, L. (*G. and F.* 1888, v. 1, p. 249.) H. shr. or small tree, something like *C. coccinea,* but distinguished by its pale grey branches,

almost without thorns; thicker l., without glands, densely pubescent beneath; and pubescent infl.; and also by its broader, looser corymbs, disagreeable odour, and later time of flowering and ripening its smaller, oblong, upright fr. United States.

Crinum Powelli, vars. **album** and **intermedium,** Gumbleton. (*G. C.* 1888, v. 4, p. 483.) Liliaceæ. Garden hybrids.

Crocosma aurea, var. **imperialis,** Leicht. (*W.G.* 1888, p. 340.) Iridaceæ. G. A stout form, growing to 3 ft. in height, and very floriferous, with fiery orange-red fl., nearly twice as large as in the type. S. Africa.

Crocosma aurea, var. **maculata,** Baker. (*G. C.* 1888, v. 4, pp. 407 and 565, f. 80; *H. G.* 1888, p. 549; and *W. G.* 1888, p. 435.) G. bulb. A handsome variety, with large orange fl., having the three inner segments marked near the base with a dark red-brown spot. Eastern S. Africa.

Crocus imperati, vars. **albiflora, atropurpurea, flore pleno, lilacina, pallida,** and **purpurea.** (*B. T. O.* 1888, p. 135.) Iridaceæ. Garden varieties.

Crocus imperati, var. **purpureus,** Damm. (*Gfl.* 1888, p. 465, t. 1280, f. 2, and *H. G.* 1888, p. 500.) H. A purple-flowered form.

Croton picturatum, André. (*R. H.* 1888, p 423.) Euphorbiaceæ. S. shr. A garden variety of **Codiæum variegatum.**

Cryptanthus Morrenianus, Regel. (*Gfl.* 1888, p. 157.) Bromeliaceæ. L. narrowed into a channelled petiole at the base, oblong-lanceolate, recurving; remotely spine-toothed, apex attenuate-cuspidate. Bracts slightly reddish, dusky-tomentose on the back, overtopping the sessile head of yellowish fl. Brazil. Syn. *Disteganthus Moensi,* Makoy.

Cryptogramme acrostichoides, R. Br. (*G. and F.* 1888, v. 1, p. 341.) Filices. G. or H. H. An attractive little fern, similar to *C. crispa,* but larger and stronger in growth, the barren segments thicker in texture, more prominently veined, and not so deeply cut, the fertile segments $\frac{3}{8}$–$\frac{1}{2}$ in. long. N. America.

Cupressus Lawsoniana, var. **stricta.** (*B. T. O.* 1888, p. 230, f. 24.) Coniferæ. Garden variety.

Cycnoches versicolor, Rchb. f. (*G. C.* 1888, v. 4, p. 596.) Orchideæ. An interesting plant. Raceme several flowered. Sep. and pet. oblong, acute, the pet. a little the broadest, at first of a dark green, with darker veins, changing to deep brown. Lip oblong acute, convex, with an excavation near the base, having an erect tooth on each side, thick and fleshy, white, changing to yellowish, spotted on the apical part with purple. Brazil.

Cymbidium ensifolium, var. **estriatum,** Williams. (*Williams' Cat.* 1888, p. 20.) Orchideæ. A variety with narrow perianth segments. Sep. green, with a few red lines. Pet. white, with purple lines. Lip white, the front lobe yellow, with a few brown spots. Fl. very sweetly scented. Assam.

Cynosorchis elegans, Rchb. f. (*G. C,* 1888, v. 3, p. 424, and *H. G.* 1888, p. 279.) Orchideæ. A small terrestrial orchid, with light green oblong-lanceolate acute l., 2 in. long, $\frac{1}{2}$ in. broad, striped and barred with purple beneath. Raceme with a few small white and rosy-tinted fl., marked with deep purple spots and lines on the 3-lobed lip; spur slender, shorter than the ovary. Madagascar.

Cynosorchis Lowiana, Rchb. f. (*G. C.* 1888, v. 3, p. 424, and *H. G.* 1888, p. 280.) A small terrestrial orchid, with cuneate-oblong acuminate l., about a span long, and nearly $\frac{3}{4}$ in. broad, dark green. Scape slender, with a few small fl. Sep. and pet. whitish green. Lip 4-lobed, lilac, with an obcordate dark purple spot. Madagascar.

Cyperorchis elegans, Blume. (*B.M.,* t. 7007; *G. C.* 1888, v. 4, p. 15; *H. G.* 1888, p. 399; and *G. and F.* 1888, p. 300.) Orchideæ. This is the *Cymbidium elegans.* Lindl.

Cyperus distans, var. **spiraliformis.** (*W. G.* 1888, p. 31.) Cyperaceæ. H. Not described, but compared with *Juncus spiralis* as to habit.

Cypripedium, see also **Selenipedium.**

Cypripedium Arthurianum, var. **pallidum,** Linden. (*L.,* v. 3, p. 53, pl. 121.) Orchideæ. Garden hybrid.

Cypripedium Atys, Rolfe. (*G. C.* 1888, v. 4, p. 6, and *H. G.* 1888, p. 397.) Garden hybrid.

Cypripedium bellatulum, Rchb. f. (*G. C.* 1888, v. 3, pp. 648 and 747, f. 99; and v. 4, p. 215; *B. T. O.* 1888, p. 307; *H. G.* 1888, pp. 456 and 555; *L.,* v. 4, p. 13, pl. 149; *O.* 1888, p. 256; and *W. G.* 1888, p. 468.) A large-flowered form of **C. Godefroyæ,** with large spots.

—— var. **egregium,** Rchb. f. (*G. C* 1888, v. 4, p. 122, and *H. G.* 1888 p. 456.) A form with a short, nearly trilobed sep., and light purple spots.

Cypripedium Berggrenianum, Rchb. f. (*G. C.* 1888, v. 3, p. 798, and *H. G.* 1888, p. 396.) Garden hybrid.

Cypripedium Burfordiense, Rchb. f. (*G. C.* 1888, v. 4, p. 724.) Garden hybrid.

Cypripedium caligare, Rchb. f. (*G. C.* 1888, v. 3, p. 264; *H. G.* 1888, p. 226; and *O.* 1888, p. 130.) Garden hybrid.

Cypripedium callosum, var. **sublæve,** Rchb. f. (*G. C.* 1888, v. 3, p. 331, and *H. G.* 1888, p. 228.) A variety without any spots on the disk of the pet.

Cypripedium Canhami. (*W. G.* 1888, p. 32.) Garden hybrid.

Cypripedium Cannartianum, Lind. (*L.*, v. 3, pp. 93 and 141.) A variety of **C. philippinense,** with 3 sepals, the lower sep. being 2-lobed, or the two component seps. being fully developed. Syn. *C. Roebellini,* var. *Cannartianum,* Lind.

Cypripedium chelseense, Rchb. f. (*G. C.* 1888, v. 4, p. 406, and *H. G.* 1888, p. 549.) Garden hybrid.

Cypripedium chlorops, Rchb. f. (*G. C.* 1888, v. 3, p. 584, and *H. G.* 1888, p. 308.) Syn. *Selenipedium chlorops,* Rchb. f. Garden hybrid.

Cypripedium ciliolare, var. **Miteauanum,** Linden. (*L.*, v. 3, p. 78, and v. 4, p. 7, pl. 146.) A variety having the whole fl., except the lower sep., suffused with a rich purple hue. Philippines. Syn. *C. Miteauanum,* Linden and Rod.

Cypripedium concolor, var. **sulphurinum,** Rchb. f. (*G. C.* 1888, v. 4, p. 264, and *H. G.* 1888, p. 504.) A green-leaved var., with light sulphur-coloured fl. without spots, but with two darker yellow marks on the staminode.

Cypripedium conspicuum, Rchb. f., and var. **pictum,** Rchb. f. (*G. C.* 1888, v. 3, p. 521, and *H. G.* 1888, p. 281.) Garden hybrids.

Cypripedium Dauthieri, var. **Rossianum,** Rchb. f. (*G. C.* 1888, v. 3, p. 425; *H. G.* 1888, p. 280; and *B. T. O.* 1888, p. 136.) Garden hybrid.

Cypripedium dilectum, Rchb. f. (*G. C.* 1888, v. 3, p. 330, and *H. G.* 1888, p. 228.) Intermediate between *C. Boxallii* and *C. hirsutissimum.* Upper sep. light green, with rows of blackish-purple spots, and a white apical margin. Pet. broadest at the apex, mid line blackish, the part above it purple-mauve, the part below it green, with obscure reticulations; the base is spotted with blackish. Lip yellowish-green, spotted inside with blackish-purple. Staminode narrower than in *C. Boxallii,* 3-lobed at the apex. Ovary densely hairy, equalling the bract.

Cypripedium Electra, Rolfe. (*G. C.* 1888, v. 3, p. 297, and *H. G.* 1888, p. 227.) Garden hybrid.

Cypripedium Elliottianum, Rchb. f. (*G. C.* 1888, v. 4, pp. 501, 532, and 556, with fig.) A handsome and distinct species, belonging to the same group as *C. Stonei, C. Rothschildianum,* &c. L. 12-15 in. long, 1½–2 in. broad, bright green. Scape a ft. or more high, 2–5 flowered. Upper sep. elliptic, acute, flat, white, with dark purple brown stripes. Lower sep. broadly ovate, coloured like the upper sep. Lip similar to that of *C. Stonei,* rosy-tinted. Pet. 5–6 in. long, broadly linear at base, tapering into narrow tails, white, spotted with chocolate. Staminode linear, bifid at apex, bent downwards. Philippines.

Cypripedium fasciculatum, Kell. (*G. and F.* 1888, v. 1, p. 90, f. 16, and p. 138.) H. terrestrial. A small-flowered species of no great beauty, 3–12 in. high, with a pair of ovate or broadly-elliptic l., and a 1–4-flowered spike of fl. about 1–1½ in. in diam. Sep. and pet. lanceolate, acute, greenish. Lip 4–5 in. long, greenish-yellow, with a purple-brown margin. N.W. America.

Cypripedium Fitchianum, Will. (*W. O. A.*, v. 8, pl. 350; *Williams' Cat.* 1888, p. 20; and *G. C.* 1888, v. 4, p. 600.) Garden hybrid.

Cypripedium Galatea, Rolfe. (*G. C.* 1888, v. 3, p. 168; *H. G.* 1888, p. 178; and *O.* 1888, p. 132.) Garden hybrid.

Cypripedium Godseffianum, Rchb. f. (*G. C.* 1888, v. 3, p. 296, and *O.* 1888, p. 133.) Garden hybrid.

Cypripedium Harrisanum, var. **superbum,** Veitch. (*L.*, v. 3, p. 47, pl. 118; *G. C.* 1888, v. 3, p. 235; and *W. G.* 1888, p. 109.) Garden hybrid.

Cypripedium hephæstus, Kent. (*G. C.* 1888, v. 3, p. 425, and *H. G.* 1888, p. 280.) Garden hybrid.

Cypripedium Houtteanum. (*G. C.* 1888, v. 3, p. 561.) See **C. Vanhoutteanum.**

Cypripedium insigne, var. **Horsmanianum,** Rchb. f. (*G. C.* 1888, v. 4, p. 693.) Garden variety, with narrow fl., and a beak in the middle of the mouth of the lip.

Cypripedium insigne, var. **Sanderæ,** (*G. C.* 1888, v. 4, pp. 606 & 692). A variety with clear citron yellow, wax-

like, shining fl., having the apical third of the upper sep. white and a few brown dots along the central nerve.

Cypripedium Lathamianum, Rchb. f. (*L.* v. 3, p. 74; *G. C.* 1888, v. 3, p. 360; and *H. G.* 1888, p. 228.) Garden hybrid.

Cypripedium Lawrenceanum, var. **pleioleucum,** Rchb. f. (*G. C.* 1888, v. 3, p. 744; and *H. G.* 1888, p. 370.) Garden variety.

Cypripedium Leeanum, var. **maculatum,** (*G. and F.* 1888, v. 1, p. 4.) Garden hybrid.

Cypripedium Lemoinierianum, (*G. C.* 1888, v. 3, p. 712; and *H. G.* 1888, p. 370.) Garden hybrid.

Cypripedium margaritaceum, Franchet (*O.* 1888, p. 368, with pl.) A very distinct and remarkable species. Rhizome elongate. Stem short with two sub-opposite broadly elliptic l. at the middle, of a somewhat glaucous green, spotted with purplish brown. 5–9 nerved. Peduncle 1-flowered 3 in. long, glabrous. Sep. elliptic, the upper one broadest; pet oblong lanceolate acute, all shortly ciliate on the margins, and all of a deep purple colour marked with rows of blackish-purple spots. Lip very remarkable, slightly concave above, with a circular, crenulated orifice, formed by the short airicles overlapping each other, keeled beneath, dark brown covered with small tubercles. Staminode deflexed, cordate. Yunnan, China.

Cypripedium Miteauanum, Lind. and Rod. (*L.* v. 4, p. 7, p. 146; *G. C.* 1888, v. 4, p. 326; and *H. G.* 1888, p. 502.) *See* **C. ciliolare** var. **Miteauanum,** Lind.

Cypripedium Moensianum, Linden. (*L.* v. 3, p. 69, p. 129; and *G. C.* 1888, v. 3., p. 561.) A beautiful plant, very similar to *C. argus,* and probably a variety of that species, differing in its broader upper sep., and pet. which are marked with larger and more numerous spots, the upper sep. is also spotted along the nerves. Philippines.

Cypripedium nitidissimum, Rchb. f. (*G. C.* 1888, v. 4, p. 6; and *H. G.* 1888, p. 396.) Garden hybrid. Syn. *Selenipedium nitidissimum,* Rchb. f.

Cypripedium Pageanum, Rchb. f. (*G. C.* 1888, v. 4, p. 264; *H. G.* 1888, p. 504; and *O.* 1888, p. 257.) Garden hybrid.

Cypripedium pavoninum, Rchb. f. (*G. C.* 1888, v. 3, p. 264; *H. G.* 1888, p. 226; and *O.* 1888, p. 132.) Garden hybrid.

Cypripedium Petersianum, Rchb. f. (*G. C.* 1888, v. 3, p. 331; and *H. G.* 1888, p. 228.) Garden hybrid.

Cypripedium Pitcherianum, Manda. (*American Florist* 1887, v. 3, p. 178; *G. C.* 1888, v. 3, p. 42; *H. G.* 1888, p. 127; and *O.* 1888, p. 97.) Allied to *C. barbatum.* L. 5 in. long, 2½ in. broad, acute, green tessellated with dark green. Scape a ft. or more high, 1-flowered. Bract 1 in. long green. Ovary, 1¾ in. long, green, curved. Upper sep. 2 in. long and nearly as broad, acuminate, whitish with bright green veins and spotted with dark purple-brown. Pet. deflected, 2½ in. long, ¾ in. broad, whitish, changing to purple towards the tips, veined with green, the inner part spotted, and both edges warted with blackish-brown, edges ciliate. Lip light purple with darker veins. Staminode horseshoe-shaped with incurved points, purplish. Philippines. [Perhaps the same as **C. argus,** Rchb. f.—*N. E. Br.*]

Cypripedium polystigmaticum, Rchb. f. (*G. C.* 1888, v. 4, p. 407; and *H. G.* 1888. p. 549.) Garden hybrid.

Cypripedium Rothschildianum, Rchb. f. (*G. C.* 1888, v. 3, p. 457; *H. G.* 1888, p. 280; and *W. G.* 1888, p. 241.) Allied to *C. glanduliferum* (*C. præstans*). L. 2 ft. or more long, 2½–3 in. broad, glossy green. Scape 3 or more flowered. Upper sep. oblong acute, yellowish with numerous very dark brown stripes, and white borders. Pet. linear with a wavy base, yellowish-green with dark lines and blotches at the base. Lip like that of *C. Stonei* brown with an ochreous border to the mouth. Staminode stout at base, rising erect and then bending down into a beak-like hairy process. New Guinea.

Cypripedium Savageanum, O'Brien (*G. C.* 1888, v. 4, p. 407; and *H. G.* 1888, p. 549.) Garden hybrid.

Cypripedium Tautzianum, var. **lepidum,** Rchb. f. (*G. C.* 1888, v. 4, p. 756.) Garden hybrid.

Cypripedium variopictum, Rchb. f. (*G. C.* 1888, v. 4, p. 407; and *H. G.* 1888, p. 549.) Garden hybrid.

Cypripedium Vanhoutteanum, Hye. (*L.* v. 3, p. 71, pl. 130; and *G. C.* 1888, v. 3, p. 561, as *C. Houtteanum.*) Garden hybrid.

Cypripedium Vervaetianum, Rchb. f. (*G. C.* 1888, v. 3, p. 712; and *H. G.* 1888, p. 370.) Garden hybrid.

Cyrtanthus lutescens, Herb. (*G. C.* 1888, v. 3, p, 172.) Amaryllidaceæ. G. bulb, similar in appearance to *C. Mac-*

kenii. Umbel 3–4 flowered; fl. funnel-shaped, 2 in. long pale yellow. S. Africa.

Cytisus albus, var. **multiflorus**. (*W. G.* 1888, p. 391.) Leguminosæ. H. shr. Garden variety.

Dahlia gracilis flore pleno. (*W. G.* 1388, p. 470.) Compositæ. Garden variety.

Decaschistia ficifolia, Mart. (*G. C.* 1888, v. 4, p. 565.) Malvaceæ. S. A handsome shr. with 3–lobed l., cuneate at base, the lobes toothed, hoary beneath. Fl. 3-in or more in diameter, coppery-red, merging into yellow, with a rosy spot at the base. Birma.

Delphinium nudicaule, var. **aurantiacum**. (*W. G.* 1888, p. 436.) Ranunculaceæ. Garden variety.

Delphinium viride, S. Wats. (*G. and F.* 1888, v. 1, p. 149 and 150, f. 29; and *W. G.* 1888, p. 342.) H. annual on biennial, with palmately cut and toothed l., and laxly racemose fl., with the sep. and the long stout spur yellowish-green and the pet. deep purple. Chihuahua.

Dendrobium aphrodite, Rchb. f. (*Veitch Man. Dendrob.* p. 17.) Orchideæ. This is the first published name for *D. nodatum*, Ldl.

Dendrobium aureum, var. **album**, Veitch. (*Veitch Man. Dendrob.* p. 20.) Fl. very pale nearly white.

—— Var. **aurantiacum**, Veitch. (*Veitch Man. Dendrob.* p. 20.) Fl. orange-yellow.

—— Var. **Henshalli**, Veitch. (*Veitch Man. Dendrob.* p. 19.) This is the plant figured in Botanical Magazine t. 4970, as *D. heterocarpum* var. *Henshalli*.

Dendrobium Brymerianum, var. **histrionicum**, Rchb f. (*G. C.* 1888, v. 3, p. 104; *H. G.* 1888, p. 128; *O.* 1888, p, 225; and *Veitch Man. Dendrob.* p. 25.) An autumn flowering form, which sometimes has a fringe to the lip, at other times no fringe. Bhamo.

Dendrobium crassinodi - Wardianum, Veitch. (*Veitch Man. Dendrob.* p. 32.) A synonym of **D. melanophthalmum**, Rchb. f.

Dendrobium chryseum, Rolfe. (*G. C.* 1888, v. 3, p. 233; *H. G.* 1888, p. 180; *O.* 1888, p. 166; and *Veitch Man. Dendrob.* p. 28.) Stems 1½ feet high, slender. L. 3–4 in. long, linear-lanceolate. Racemes lateral, 2–3 flowered. Fl. rich golden yellow. Sep. oblong, 1½ in. long. Pet. broad, elliptic. Lip. orbicular, minutely pubescent, and minutely fringed. Assam.

Dendrobium chrysodiscus, var. **oculatum**, Veitch. (*Veitch Man. Dendrob.* p. 87.) Garden hybrid.

Dendrobium doreyanum, L. Linden. *L'Hort. Int. Cat.* 1888–9, p. 48.) New Guinea. No description.

Dendrobium gratiosissimum, Rchb. f. (*Veitch Man. Dendrob.* p. 47.) An earlier name for *D. Bullerianum*.

Dendrobium Griffithianum, var. **Guibertii**, Veitch. (*Veitch Man. Dendrob.* p. 48.) This is the *D. Guibertii*, Carr. now referred as a variety of *D. Griffithianum*.

Dendrobium infundibulum, var. **Jamesianum**, Veitch. (*Veitch Man. Dendrob.* p. 50.) This is the *D. Jamesianum* Rchb. f.

Dendrobium Kingianum, var. **album**, Williams and Warner. (*W. O. A.* v. 7, pl. 332; and *G. C.* 1888, v. 3, p. 801.) A white flowered variety. Australia.

Dendrobium Lansbergeanum, L. Linden. (*L'Hort. Int. Cat.* 1888–9, p. 49.) New Guinea. No description.

Dendrobium macrophyllum, a Rich. var. **stenopterum**, Rchb. f. (*G. C.* 1888, v. 3, p. 393; and *H. G.* 1888, p. 229.) A variety with narrow triangular side lobes to the lip, which is yellow, with some pallid spots and markings on the front lobe, and a few brown lines on the side lobes. The sep. and pet. are ochre-yellow, dotted on the outside with dark reddish-brown. It also occurs with yellow fl.

Dendrobium moschatum, var. **calceolaria**, Veitch. (*Veitch Man. Dendrob.* p. 62.) A synonym of **D. moschatum** var. **cupreum**, Williams.

Dendrobium murrhiniacum, Rchb. f. (*G. C.* 1888, v. 3, p. 554; and *H. G.* 1888, p. 308.) Garden hybrid.

Dendrobium nobile, var. **elegans**, Veitch. (*Veitch Man. Dendrob.* p. 64.) A large flowered form with broader pet. white at the base, and the lip with a pale yellow zone around the maroon-coloured disk and the apical margin rosy-purple.

—— Var. **Sanderianum**, Rchb. f. (*G. C.* 1888, v. 3, p. 554; *H. G.* 1888, p. 308; and *R.* v. 2, p. 21, t. 58.) A variety with bright purple, sep. and pet. white at their base. Lip with a large dark blotch on the disk, rosy-purple on each side of it, and a white area in front with purple veins.

—— Var. **Schrœderianum**, Veitch. (*Veitch Man. Dendrob.* p. 64.) A large flowered variety with broad seg-

ments, sep. and pet. white, sometimes tipped with amethyst-purple. Lip. with rich maroon-purple disk bordered with pale yellow, and a white margin.

Dendrobium Pitcherianum, Rchb. f. (*G. C.* 1888, v. 3, p. 392; and *H. G.* 1888, p. 229.) Stems like those of *D. nobile.* Sep. oblong, obtuse, whitish-rosy with purple tips. Pet. broader with a deep purple tip and rosy mid line. Lip cordate-oblong in outline, involute at the base, with a flat border, hairy, light yellow, with a purple tip and lines on each side of the thickened mid line.

Dendrobium porphyrogastrum, Rchb. f. (*Veitch Man. Dendrob.* p. 90.) Garden hybrid.

Dendrobium sphegidoglossum, Rchb. f. (*G. C.* 1888, v. 4, p. 179.) This is a synonym of **D. stuposum,** Lindl. It has spindle-shaped stems about 9 in. high, narrow oblong obtuse l., and rather small yellowish-white fl., the lip having an orange-red tip and some red veins on the sides. Upper sep. lanceolate, acute; side sep. elongate-triangular, acute; pet. lanceolate, obtuse; lip narrow, 3-lobed, fringed with curled hairs. Burma, Siam.

Dendrobium splendidissimum, var. **grandiflorum,** Veitch. (*Veitch Man. Dendrob.* p. 91.) Garden hybrid.

Dendrobium strebloceras, var. **Rossianum,** Rchb. f. (*L.* v. 3, p. 59, pl. 124; *B. T. O.* 1888, p. 92; *G. C.* 1888, v. 3, p. 72; *H. G.* 1888, p. 127; *O.* 1888, p. 193; and *L'Hort. Int. Cat.* 1888–9, p. 43.) A variety with white fl., the pet. pale greenish tinted, and the lip. and sep. changing to yellowish. New Guinea.

Dendrobium Wattii, Rchb. f. (*G. C.* 1888, v. 4, p. 724.) This is the plant figured in the Botanical Magazine t. 6716 as *D. cariniferum* var. *Wattii,* Hook. f.

Dendrophylax Fawcetti, Rolfe. (*G. C.* 1888, v. 4, p. 533.) Orchideæ. Much in the way of D. funale. A leafless plant with a tuft of long green roots springing from a very short stem, from which arises a scape varying from 2–23 in. long, bearing several fl. 2 in. in diam. Sep. and pet. lanceolate, acute, delicate greenish-white; lip 2-lobed, white, with a slender spur 7 in. long. Cayman Islands.

Dianthus plumarius scoticus flore pleno. (*W. G.* 1888. p. 242.) Garden variety.

Diastema picta, Regel. (*Gfl.* 1888, p. 240.) Gesneraceæ. S. per. A pretty little herb 6–9 in. high, softly hairy; with scaly rhizomes like those of an *Achimenes;* erect branching stems; opposite, petiolate, ovate or lanceolate crenate l., with 1-3 pedicellate fl. in their axils. Calyx lobes oblong-elliptic Corolla campanulate-tabular $\frac{3}{4}$ in. long; the tube white, dotted with purple; the limb spreading, white, with the lower lobe marked with a dark purple spot. Andes of Columbia

Dichorisandra pubescens, var. **tæniensis,** (*G. C.* 1888, v. 3, p. 557, f. 75; *B. T. O.* 1888, p. 306; *G. and F.* 1888, v. 1, p. 204, as var. *talmiensis*; *H. G.* 1888, p. 308; *R. H.* 1888, p. 249, f. 57; and *W. G.* 1888, p. 281.) Commelinaceæ. S. per. A pretty foliage plant, with lanceolate acuminate l. of a rich green, striped with white, and short terminal spike-like panicles of blue and white fl. Brazil.

Diervilla sessilifolia, Buckl. (*G. and F.* 1888, p. 273.) Caprifoliaceæ H. A handsome shr. with sessile l., and many-flowered cymes of showy yellow fl. Eastern United States.

Dipodium paludosum, Rchb. f. (*G. C.* 1888, v. 4, p. 91; and *H. G.* 1888, p. 398.) Orchideæ. L. distichous, oblong, acute, membranous. Scapes long, with a raceme of 10–12 fl. Sep. and pet. lanceolate-acute, creamy-white, spotted with purple. Lip cuneate-oblong, obtuse, velvetty down the centre, and with two teeth at the base, white, with the side parts of the front lobe marked with purple lines. Cambodia, Malacca, Borneo.

Disa lacera, Sw. (*G. C.* 1888, v. 4, pp. 664 and 707.) Orchideæ. G. Terrestrial Orchid of interesting character. L. linear-filiform. Fl. stem 10–12 in. high, leafless, with a few sheaths, and several blue fl. in a lax raceme. Upper sep. helmet-shaped, with a short spur; side sep. obliquely oblong, somewhat boat-shaped. Pet. with a broad basal lobe and a narrow very abruptly hooked apical part. Lip oblong, lacerate, or fringed at the apex only, or nearly, or quite entire. S. Africa.

—— Var. **multifida,** N. E. Br. (*G. C.* 1888, v. 4, p. 664, f. 93.) Differs only in having the lip more or less deeply fringed from base to apex. S. Africa.

Disteganthus Moensi, Makoy. See **Cryptanthus Morrenianus,** Regel.

Dodecatheon splendidum. (*W. G.* 1888, p. 205–6, f. 44.) Primulaceæ. A garden form of **D. meadia,** L.

Douglasia lævigata, A. Gr. (*B. M.* t. 6996; *G. C.* 1888, v. 3, p. 524–5, f. 71; *G. and F.* 1888, v. 1, p. 204; and *H. G.* 1888, pp. 282, 311.) Primulaceæ. H. alpine per., about 2 in. high, densely

tufted. L. ½–¾ in. long, linear-lanceolate, entire, in small rosettes. Scapes slender, with a rosette of bracts at the apex, from which arise 2–5, long pedicelled, Primrose-like pink fl., ⅓ in. in diam. Calyx campanulate, with ovate teeth. Oregon.

Dracæna argenteo-striata, Bull. (*Bull. Cat.* 1888, p. 8; and *W. G.* 1888, p. 332.) Liliaceæ. S. shr. An ornamental foliage plant, with narrow, linear-lanceolate, bright green l., striped with creamy-white and silvery grey. Seems to be a **Cordyline.** South Sea Islands.

Dracæna Barteti. (*R. H.* 1888, p. 530.) Garden variety.

Dracæna indivisa, var. **Doucetiana,** Rodigas. (*Ill. H.* v. 35, p. 15, pl. 40; and *H. G.* 1888, p. 232.) See **Cordyline indivisa.**

Dracæna Poubellei. (*R. H.* 1888, p. 530.) Garden variety.

Echinocactus Haselbergii, Forst. (*B. M.* t. 7009; *G. C.* 1888, v. 4, p. 186; *G. and F.* 1888, v. 1, p. 371; and *H. G.* 1888, p. 459.) Cactaceæ. G. succulent. An elegant species, with a globose, many angled stem, 2–2½ in. in diam., with tufts of short spreading whitish spines, and brilliant orange-red fl. an in. in diam.

Echinocactus texensis, Hopfer. (*Gfl.* 1888, p. 633, t. 1286.) Cactaceæ. G. succulent. A distinct and pretty species. Stem depressed-globose 5–6 in. in diam., with many acute angles, bearing very distant tufts of about 8 stout brown spines, ½–¾ in. long, transversely ridged. Fl. from the axils of the younger spine-tufts 2–2½ in. in diam., of a delicate rosy-pink. Pet. oblanceolate, beautifully fringed. Berry 1 in. in diam., depressed globose, scarlet, bearing a few spines on the top. Texas.

Eichornia crassipes, Solms. (*Gfl.* 1888, p. 225, t. 1271.) Pontederiaceæ. This is the corrected name for the well known ornamental S. aquatic, *Pontederia crassipes,* Mart.

Elæagnus Simoni, var. **tricolor.** (*W. G.* 1888, p. 164.) Elæagneæ. Garden variety.

Epidendrum auriculigerum, Rchb. f. (*G. C.* 1888, v. 4, p. 34; and *H. G.* 1888, p. 397.) Orchideæ. Much like *E. brassavola,* with long narrow sep. and pet. The lip is auricled near the base, the front lobe is triangular acuminate, and there are two long swollen keels between the auricles, and three short ones in front.

Epidendrum O'Brienianum, Rolfe. (*G. C.* 1888, v. 3, p. 770, 771, f. 103; and *H. G.* 1888, p. 371.) Garden hybrid.

Epidendrum Stamfordianum, var. **Leeanum,** Rchb. f. (*G. C.* 1888, v. 3, p. 521; and *H. G.* 1888, p. 281.) A variety in which the ochreous sep. and pet., and the pale rose-coloured lip is spotted with purple.

Epidendrum tampense, Lindl. (*G. C.* 1888, v. 4, p. 150; and *H. G.* 1888, p. 457.) A small slender species, with small ovoid bulbs, linear l. 6 in. long, and a slender scape, bearing several fl. of about 1¼ in. in diam. Sep. and pet. cuneate-linear yellowish-brown. Lip. with linear side lobes, and a rounded obtuse front lobe, white, with purple lines that are more or less confluent. Florida.

Eria bicolor, Lindl. (*G. C.* 1888, v. 3, p. 9; and *O.* 1888, p. 263.) Orchideæ. A pretty species, with stout stems 4–5 in. long, very timid at the base, bearing 5–7 narrow, cuneate-lanceolate, acuminate, stiff l. as long as the stem, standing nearly erect at the top, and one-sided racemes of pure white fl., having white bracts and pubescent purple ovaries and rachis. Sep. triangular acuminate; pet. narrower; lip sigmoid, trifid, side lobes blunt, mid lobe acute, no keels or ridges. Ceylon.

Eria striolata, Rchb. f. (*Ill. H.* v. 35, p. 35, pl. 48; *G. C.* 1888, v. 3, p. 554; and *H. G.* 1888, pp. 308, 373.) Allied to *E. stellata,* Lindl., with short bulbs, broad cuneate-oblong acute l., and a stout, erect raceme of moderate sized fl. Sep. and pet. linear acute, ochreous, striate, with purple, the sep. sparsely hispidulous outside. Lip oblong, 3-lobed, 3-keeled. New Guinea.

Erica sicula, Guss. See **Pentapera sicula,** Kl.

Eriostemon obovalis, flore pluralis. (*W. G.* 1888, p. 118.) Rutacæ. Garden variety.

Erythronium Hendersoni, S. Wats. (*B. M.* t. 7017; *G. C.* 1888, v. 3, pp. 652, 653, f. 86; and v. 4, p. 301; *G. and F.* 1888, v. 1 p. 317, f. 50; *H. G.* 1888, pp, 310, 506; and *W. G.* 1888, p. 433.) L. two, ovate, or ovate-lanceolate obtuse, dull green, faintly spotted with brown. Scape 6–8 in. long, 1–2-flowered. Fl. drooping, 1½ in. in diam., the segments lanceolate, recurving, pale lilac, with a dark purple spot at the base. Oregon. [This is a synonym of **E. revolutum,** Smith, as shown by Menzies specimen in the Kew Herbarium. N. E. Brown.

Esmeralda bella, Rchb. f. (*G. C.* 1888, v. 3, p. 136; *Bull, Cat.* 1888, p. 8; *H. G.* 1888, p. 176; *L'Hort. Int. Cat.* 1888–9, p. 49; and *O.* 1888, p. 194. Orchideæ. A fine plant, with short, broad, shining l., unequally bilobed at the apex, and fl. similar in form to those of *E. Cathcarti*. Sep. and pet. straight, light ochre, barred with brown. Lip white, margined with brown on the very broad tumid front lobe, and striped with purple-brown on the side lobes. There is a roundish basal tubercle, and a long, tumid, ligulate body, extending nearly to the apex, where there is another roundish tubercle.

Eucalyptus urnigera, Hook. f. (*G. C.* 1888, v. 3, p. 460, f. 64; and *G. and F.* 1888, v. 1, p. 168.) Myrtaceæ. H. tree. L. narrow lanceolate acute, dull green, coriaceous, 3 in. long, $\frac{3}{4}$ in. broad, on petioles 1 in. long. Peduncles axillary $\frac{1}{4}$–$\frac{1}{3}$ in. long, 1–4-flowered. Buds elongate-pear-shaped, with a short conical cap. Fr. about $\frac{1}{2}$ in. long, somewhat urn-shaped. Tasmania.

Eucharis grandiflora, var. **Moorei,** Baker. (*G. C.* 1888, v. 4, p. 628.) Amaryllidaceæ. S. bulb. A distinct plant, with roundish l., much smaller than in E. grandiflora, the fl. are also rather smaller, having the corona white inside, with a fine yellow line where the filaments run down, the teeth between the filaments are large and acute.

Eulophia gigantea, N. E. Br. Orchideæ. S. terrestrial Orchid. A fine handsome plant, growing several ft. high. L. 3–4 ft. long, cuneate, oblong-acuminate plicate. Raceme lax. Fl. $2\frac{1}{2}$ in. in diam. Sep. narrow, cuneate-oblong, greenish. Pet. very large, elliptic-oblong, lilac. Lip with a very stout, short, blunt spur, and 3 yellow keels on the disk at the base of the broad rounded front lobe, which is purple with darker stripes. W. Trop. Africa. Syn. *Lissochilus giganteus,* Welw. (*G. C.* 1888, v. 3, p. 616–7, f. 83, and v. 4, p. 353.)

Eulophia Ledienii, Stein. (*Gfl.* 1888, p. 609, t. 1285, *as E. maculata.*) A distinct looking Orchid, with ovoid, grooved bulbs an in. long, bearing one cuneate-oblong l. 3–4 in. long, by $1\frac{1}{2}$ in. broad, handsomely variegated, with irregular bands of dark green and greyish; and an erect slender lax spike of not very large fl. Sep. lanceolate acute reddish-brown. Pet. narrower erect white, forming with the upper sep. a kind of hood. Lip with erect side lobes, a broadly ovate front lobe, white, with two red spots. Lower Congo. [This plant is also quoted as *E. maculata,* Rchb. f. at the above place, but it is distinct from the Mauritian and Brazilian species, both of which are included under E. maculata, by Reichenbach. It seems therefore, best to retain the name above given for it.—*N. E. B.*]

Eustrephus Brownii, Mueller. (*Gfl.* 1888, p. 596, p. 132.) Liliaceæ. G. climber. A synonym of **E. latifolius.**

Exocarpus cupressiformis, Labill. (*Gfl.* 1888, p. 288, f. 60.) Santalaceæ.

Fagus purpurea, var. **roseo-marginata.** (*G. C.* 1888, v. 3, p. 779.) Cupuliferæ. A garden variety of the Copper Beech, with a pink edge to the young l.

Fagus sylvatica conglomerata Bandrilleri. (*W. G.* 1888, p. 347; and *G. and F.* 1888, v. 1, p. 468.) Garden variety.

Fendlera rupicola, Eng. and Gr. (*G. and F.* 1888, v. 1, p. 236.) Saxifragaceæ. H. shr., 2–4 ft. high, with small, opposite, entire, subsessile l., and solitary, large, white, showy fl., with long conspicuous stamens. New Mexico.

Ficus Canoni, N. E. Br. (*G. C.* 1888, v. 3, p. 9; and *H. G.* 1888, p. 124.) Urticaceæ. S. shr. This is the plant known in gardens as *Artocarpus Canoni,* referred to its right genus. Society Islands.

Fuchsia semperflorens, Rozain. (*W. G.* 1888, p. 244.) Onagrarieæ. Garden hybrid.

Galanthus. For notes on the species of this genus, see *Le Jardin* 1888, p. 139–140.

Galanthus corcyrensis, Leicht. (*Jard.* 1888, p. 139.) H. bulb. A small variety of **G. nivalis.** Corfu.

Galanthus nivalis, var. **serotinus,** of Gardens. (*Jard.* 1888, p. 140.) A late flowering variety.

Galanthus Olgæ, Orph. (*Jard.* 1888, p. 140; and *G. and F.* 1888, v. 1, p. 499, as *G. Reginæ Olgæ,* and *G. Olgæ Reginæ.*) H. bulb, flowering in autumn. L. 6–8 in. long, $\frac{1}{4}$ in. broad, very glaucous beneath. Fl. large, white, without spots on the inner segments? Greece.

Galanthus Sharlocki, Casp. (*G. C.* 1888, v. 3, p. 243.) H. bulb. A snowdrop, with green lines on the outer perianth segments, and two upright, green, leaf-like bracts. Europe.

Gentiana calycosa, Griseb. (*Gfl.* 1888, p. 193, t. 1270, f. a–c; *G. C.* 1888, v. 3, p. 563; and *H. G.* 1888, p. 279.) H. per., with erect unbranched stems, 4–6 in. high, bearing opposite, subconnate,

ovate l. an in. long; and a solitary fl. about 1½ in. long, with spreading corolla lobes, alternating with narrow bifid processes; deep blue dotted at the base of the lobes with white. California and Oregon.

Gentiana carpathica, Kit. (*Jard.* 1888, p. 113.) H. per. [No description given, and in the original description of Kitaibel it merely states that the l. are obovate, sessile, and the upper ones distant; the fl. are sessile, with a transparent veiny calyx. Carpathian Alps. N. E. Brown.]

Gentiana Charpentieri, Thomas. (*Jard.* 1888, p. 76.) H. per., very similar to *G. lutea*, and supposed to be a hybrid between that species and *G. punctata*. The calyx is 5-toothed, and the corolla yellow, dotted with red. Alps, Switzerland.

Gentiana Clusii, Perr. and Song. (*W. G.* 1888, p. 180, and p. 178, f. 36.) H. alpine per., something like *G. acaulis*. L. in a rosette, lanceolate acute. Peduncle 1–2 in. high. Fl. solitary, large, dark blue, with short, slightly spreading lobes. Calyx without folds between the lanceolate acuminate lobes. Alps.

Gentiana Froelichii, Jan. (*Jard.* 1888, p. 125.) H. per. An acaulescent Gentian, with a rosette of rather thick, linear-oblong, or linear-oblanceolate, subacute l., and solitary, large blue fl., on peduncles ¼–1½ in. long, with a pair of leaf-like bracts at the base of the acutely 5-toothed calyx. Alps.

Gentiana Gaudiniana, Thomas. (*Jard.* 1888, p. 76.) H. per., similar to *G. purpurea*, but usually more robust, and the calyx is entire, with about one lobe, not spathaceous; the corolla is of a somewhat lurid purple, with more pointed lobes than in G. purpurea. Alps, Switzerland. [According to Reichenbach, *G. Gaudiniana* is a synonym of **G. spuria,** Lebert.—*N. E. B.*]

Gentiana Kochiana, Perr. and Song. (*W. G.* 1888, p. 181, f. 39.) H. alpine per. in the way of *G. acaulis*, with elliptic, obtuse radical l., and large solitary fl. on short peduncles, dark blue, marked with 5 blackish-green spots. Calyx with folds between the lobes. Corolla lobes short, and scarcely spreading. Alps.

Gentiana Kummeriana, Sendt. (*Jard.* 1888, p. 76.) A hybid between *G. lutea* and *G. pannonica*. North Tyrol. Syn. *G. Haengsti*, Hausm. [No further information given, and I am unable to find where it is described.—*N. E. B.*]

Gentiana prostrata, Haenke. (*Jard.* 1888, p. 125.) H. annual. A small species 1–3 in. high, with small elliptic l., and solitary blue fl. about ¼ in. in diam., calyx 5-toothed. Carinthian Alps, Siberia, N. America.

Gentiana Thomasii, Gill. (*Jard.* 1888, p. 76.) This is another name for **G. rubra Clairv.** It is very similar to *G. lutea* in appearance, but the corolla has no folds, is purplish outside, and the tube is about equal to the lobes. Alps, Switzerland.

Gingko biloba, var. **pyramidalis.** (*W. G.* 1888, p. 214.) Coniferæ. Garden variety.

Gladiolus vinulus, Klatt. (*W. G.* 1888, p. 326 and 383.) Iridaceæ. G. bulb. A small-flowered species, with creamy-white fl., feathered with crimson. S. Africa.

Godetia pumila, var. **hybrida.** (*W. G.* 1888, p. 436.) Onagrariaceæ. Garden variety.

Grewia parviflora, Bunge. (*G. and F.*, 1888, v. 1, p. 297.) Tiliaceæ. H. shr. of botanical interest, 2–3 ft. high, with large, unequally serrate l., with 3 prominent veins, hispidulous above, whitish beneath. Fl. small, yellow, in dense, pedunculate umbels, hidden by the l. North China.

Gundelia Tournefortii, L. (*R. H.*, 1888, p. 53, f. 12; *G. and F.*, 1888, v. 1, p. 233; *and W. G.*, 1888, p. 391.) Compositæ. H. H. per. A stout thistle-like plant, with pinnatifid, spiny, bright green l., veined with white; and globose spiny heads of small chocolate and yellow fl., surrounded by an involucre of leaf-like bracts. Algeria, Persia, Afghanistan.

Gymnogramme Pearcei, var. **robusta,** Linden. (*G. and F.* 1888, v. 1, p. 303; *Veitch Cat.* 1888, p. 11; and *L'Hort. Int. Cat.* 1888–9, p. 50.) Filices. S. Fern. A robust form, with rather large, triangular, slightly cut pinnules, and having the base of the stipes covered with a white powder. South America.

Harpalium rigidum, var. **semiplenum,** Baker. (*G. C.* 1888, v. 4, p. 417.) Compositæ. H. herbaceous per. A variety, with 2, 3, or more rows of ray florets. Garden variety.

Heliconia choconiana, S. Wats. (*G. and F.* 1888, v. 1, p. 161–2, f. 31; and *R. H.* 1888, p. 290.) Scitamineæ. S. per. 3–4 ft. high, quite glabrous. L. sessile on the sheaths, 6–10 in. long, 2 in. broad, oblong-lanceolate acuminate, shining green. Infl. sessile, terminal,

deflexed. Spathes scarlet, 2 in. long. Fl. yellowish, as long as the spathes. Guatemala.

Helichrysum devium, Johnson. (*G. C.* 1888, v. 4, p. 62.) Compositæ. G. shr. 2–3 ft. high, bushy, with snowy-white tomentose branches. L. lanceolate, sessile, 3-nerved, greyish-green, with white wavy borders. Peduncles white. Cymes of several fl. heads, with opaque white involucres and black disks. Madeira. N.B.—The above may not be in cultivation.

Heracleum persicum. (*W. G.* 1888, p. 273.) Umbelliferæ. H. per. A gigantic species growing 12–13 ft. high, with large umbels of white fl. Persia.

Hesperochiron pumilus, Port. (*Gfl.* 1888, p. 32.) Hydrophyllaceæ. H. alpine per., with tuberous rootstock. L. all radical 2–2¼ in. long, ½–¾ in. broad, spathulate, hairy beneath. Scapes naked, 1-flowered, fl. nearly rotate, white, veined with violet and with a yellow base, the lobes longer than the tube, which is hairy within. Idaho to Oregon, N. America.

Hibiscus lasiocarpus, Cav. (*G. and F.* 1888, v. 1, p. 425, f. 68.) Malvaceæ. H. H. shr. very similar to *H. moscheutos*, with broadly ovate l. more or less cordate at the base, nearly equally tomentose on both sides. Bracts of the involucre ciliate. Fl. as in *H. moscheutos*. Capsule more or less densely hairy. N. America. The form figured at the above place is the var. **occidentalis,** Gray, from Chihuahua and California, which differs in having the l. more uniformly cordate at the base, and the capsule pubescent rather than hirsute.

Hibiscus rosa-sinensis, var. **fulgens.** (*The Garden* 1888, v. 33, p. 96, t. 634; *H. G.* 1888, p. 181.) Malvaceæ. Garden variety.

Holothrix Lindleyana, Rchb.f. (*G.C.* 1888, v. 3, p. 364, f. 55 and 56.) Orchideæ. A pretty little terrestrial orchid, with 2 or 3 ovate radical l. spreading on the ground, and a slender scape bearing a raceme of small white fl. The lip is 5-lobed, with an inrolled spur. South Africa.

Howea Belmoreana, Beccari. (*B. M.* t. 7018; *G. C.* 1888, v. 4, p. 415; and *H. G.* 1888, p. 553.) Palmæ. S. Palm. This is the plant known as *Kentia Belmoreana*. Lord Howe's Island.

Hydrangea radiata, Walt. (*G. and F.* 1888, v. 1, p. 296.) Saxifragaceæ. An older name for *H. nivea*, Michx.

Hymenocallis humilis, S. Wats. (*G. and F.* 1888, v. 1, p. 114, f. 23.) Amaryllidaceæ. G. A small species, with a few short linear l., and a solitary fl. about 3 in. in expanse, with very narrow, linear, greenish segments, and a white corona. Florida. It is not stated if this is in cultivation.

Hymenocallis Palmeri, S. Wats. (*G. and F.* 1888, v. 1, p. 138, f. 25.) G. Similar to H. humilis, but with a smaller bulb, longer l., and larger fl., with narrower and longer white segments. Florida. Not stated if in cultivation.

Hypericum Moserianum, Luquet. (*Jard.* 1888, p. 209; and *W. G.* 1888, p. 470.) Hypericaceæ. H. per. Garden hybrid.

Iberis contracta, var. **rosea,** Dammann. (*Gfl.* 1888, p. 399.) Cruciferæ. H. per. A variety, with rose coloured fl.

Idesia polycarpa, var. **crispa,** Carr. (*R. H.* 1888, p. 463, f. 112; and *H. G.* 1888, p. 554.) Bixaceæ. Garden variety.

Illicium verum, Hook. f. (*B. M.* t. 7005; *G. C.* 1888, v. 4, p. 15; *G. and F.* 1888, v. 1, p. 299; and *H. G.* 1888, p. 399.) Magnoliaceæ. S. shr. of economic value (the true Star Anise). L. lanceolate or oblanceolate, obtusely acuminate, glabrous. Fl. axillary, globose, on pedicels ½ in. long, outer segments green, inner purple. China.

Imantophyllum. *See also* **Clivia.**

Imantophyllum atrosanguineum, Williams. (*Williams Cat.* 1888, p. 20, misspelled *Himantophyllum.*) A garden variety of **Clivia miniata.**

Iris albicans, Lange. (*W. G.* 1888, p. 325.) Iridaceæ. H. Similar in size and habit to *I germanica*, with pure white fl., that are very fragrant. Cyprus.

Iris Barnumi, Baker and Foster. (*G. C.* 1888, v. 4, p. 182.) H. per. Rhizome slender, fleshy. L. 5–6 in a tuft, 6 in. long, linear, acute, slightly falcate. Scape 1½–5½ in. long, 1-flowered. Falls cuneate-obovate, 2 in. long, 1 in. broad, reflexed at apex dark red-purple, with darker veins, the beard fluffy, the hairs yellow with purple tips. Standards roundish-obovate, connivent, crenate, red-purple, with darker veins, and very few hairs on the claws. Styles very spreading, brownish-yellow, with purple dots and mid line, and purple crests. Armenia.

Iris benacensis, Kern. (*Verhandl. Zoolog.-Bot. Gesellsch. Wien.* 1887, p. 649.) H. 12–15 in. high. L. ensiform. Fl. mostly in threes, the lowest

placed about the middle of the stem, the rest crowded at the apex. Falls elongate-obovate, dark violet, with darker veins, the claw whitish veined with coppery violet, the beard white at the base, yellow above. Standards broad, oblong, subemarginate, violet. Crests of stigma triangular, violaceous. Ovary oblong-cylindric. Tyrol.

Iris bracteata, S. Watson. (*G. and F.* 1888, v. 1, p. 43.) H. A distinct and rather peculiar species. Rhizome slender. L. solitary, rigid, 1–2 ft. long, ½ in. broad, or less, striate, one side green, the other glaucous. Stem angled, shorter than the l., covered with imbricating, purplish, sheathing bracts, 2-flowered. Fl. large, nearly pure yellow, on the oblong-oblanceolate sep. veined with bluish-purple. Pet. erect, narrow lanceolate. Styles spreading, recurved, with long crests. Oregon.

Iris cypriana, Baker and Foster. (*G. C.* 1888, v. 4, p. 182.) H. per. Allied to *I pallida.* L. ensiform, glaucous. Spathe-valves boat-shaped, becoming more or less scarious during the flowering. Falls cuneate-obovate 4½ in. long, 2½ in. broad, reddish-lilac, with darker veins, bearded with orange-tipped hairs. Standards oblong 3½ in. long, by 2½ in. broad, light bluish-lilac, spotted with with reddish-brown on the claw. Styles pale lilac, the crests broadly triangular. Cyprus.

Iris Kæmpferi, var. **Schirnhoferi,** Sieb. (*W. G.* 1888, p. 137, t. 1.) A variety, with yellow fl. Japan.

Iris Kochii, Kern. (*Verhandl Zoolog.-Bot. Gesellsch. Wein.* 1887, p. 649.) H. 12–16 in. high. L. ensiform, subglaucous. Fl. mostly in fours, the lowest branch at about the middle of the stem. Falls cuneate-obovate, brilliant violet, the claws whitish, veined with coppery and bearded with yellow. Standards deep purple-violet with yellowish claws, veined with purple. Crests of stigma ovate-triangular violaceous. Istria.

Iris Korolkowi, var. **concolor,** Foster. (*G. C.* 1888, v. 4, p. 37.) H. A variety, with broader and more obtuse segments than the type, and the venation almost obscured by the general violet or purple colour.

—— Var. **Leichtliniana,** Foster. (*G. C.* 1888, v. 4, p. 37.) A handsome form, with creamy-white fl., marked with a blackish-purple blotch at the base of the falls.

—— Var. **nervosa** mentioned in *Gfl.* 1888, p. 463, is doubtless a typographic error for var. **venosa.**

—— Var. **venosa,** Foster. (*G. C.* 1888 v. 4, p. 37.) A variety, with greyish-lilac fl., distinctly veined with purple.

—— Var. **violacea,** Foster. (*G. C.* 1888, v. 4, p. 37.) A variety, with violet or puce-coloured fl., with darker veins.

Iris pabularia, Naud. (*R. H.* 1888, p. 338; and *W. G.* 1888, p. 477.) H. No description. Said to be a good forage plant. Kashmir. [Can this be **I. ensata,** Thunb? *N. E. B.*]

Iris stylosa, Desf. var. **lilacina,** Sprenger. (*W. G.* 1888, p. 92, f. 15, 3.) A variety with smaller fl. than the type, of a tender lilac colour, with less pronounced yellow spots, and crests of stigma very upright. Atlas.

—— Var. **marginata,** Spenger. (*W. G.* 1888, p. 93.) A peculiar variety having the violet fl. edged with white.

—— Var. **pavonia,** Sprenger. (*W. G.* 1888, p. 93.) A variety with a white radiating area at the base.

—— Var. **speciosa,** Sprenger. (*W. G.* 1888, p. 92, f. 15, 2; and *B. T. O.* 1888, p. 165.) A variety with smaller l., and larger, brightly-coloured fl. The falls are clear violet, with the basal part whitish veined with violet-purple; the standards are brownish-purple. Stated to be only adapted for pot culture.

Iris tenuis, S. Wats. (*G. and F.* 1888, v. 1, p. 6, f. 3.) H. A distinct Iris, with very slender creeping rhizome, thin ensiform l., ¼–½ in. broad, and a very slender 2–3 flowered stem 10–12 in. high. Fl. distant in slender peduncles 1–2½ in. long, leaf-like. Spathes small, scarious. Fl. small, white, marked with yellow and purple. Falls oblong-spathulate spreading. Standards narrow, oblong, erect. Oregon.

Iris trojana, Kern. (*Verhandl. Zoolog.—Bot. Gesellsch. Wein.* 1887, p. 650.) H. ? A tall growing species, attaining 3 ft. in height. L. ensiform, glaucescent, acute. Fl. stem with several branches, the lower 3-flowered, the upper 2-flowered. Falls broadly cuneate-obovate, reflexed, brilliant purple-violet, the claws whitish, with yellowish margins veined with coppery-purple. Standards broadly elliptic, emarginate, violet. Crests of stigma, broad, toothed, porrect bluish-violet. Fl. sweet scented. Troy.

Kæmpferia secunda, Wall. (*B. M.* t. 6999; *G. C.* 1888, v. 3, p. 722; *Garden,* v. 4, p. 154, with plate; and *H. G.* 1888, p. 369.) Scitamineæ. S. per herb, 6–10 in. high. Stems slender, with 5 or 6 lanceolate acuminate green

l. Spike terminal, few flowered. Fl. an in. in diam., bright purple, with a white spot at the base of the two upper segments, and a white stripe down the centre of the roundish, bilobed lip. Assam.

Kalmia latifolia, var. **Pavarti,** André. (*R. H.* 1888, p. 540, with pl.) Ericaceæ. Garden variety.

Karatas antiacantha. (*G. C.* 1888, v. 4, p. 474.) Bromeliaceæ. Something in the way of *K. Legrellæ*, but larger. The leaves are brownish at the base, and the bracts of a deeper scarlet. [Probably the plant intended is *Bromelia antiacantha*, Bert., which is a syn. of **B. fastuosa,** Lindl.—*N. E. B.*]

Kennedya ovata. var. **cærulea,** Heede. (*Jard.* 1888, p. 93.) Leguminosæ. G. A variety with blue fl. Australia. [*K. ovata* is a synonym of **Hardenbergia monophylla,** Bth. —*N. E. B.*]

Kentia elegantissima, (*L'Hort. Int. Cat.* 1888–9, p. 43.) Palmæ. No description or locality given, but possibly a species of **Howea.**

Kœlreuteria bipinnata, Franch. (*R. H.* 1888, p. 393, f. 93; *B. T. O.* 1888, p. 307; *G. and F.* 1888, v. 1, p. 376; *Jard.* 1888, p. 59; and *W. G.* 1888, p. 124.) Sapindaceæ. H. tree of ornamental character, free flowering. L. bipinnate 2 ft. or more long, and nearly as broad; pinnæ few, each with 9 or 10 ovate, acute, toothed leaflets. Fl. resembling those of *K. paniculata*, disposed in large panicles, bright yellow, with a purple spot at the base of the pet. Fr. broadly elliptic, $2\frac{1}{2}$ in. long, purple when ripe. Yunnan, China.

Korolkowia discolor, Regel. (*G. C.* 1888, v. 3, p. 105; *H. G.* 1888, p. 128; and see *Gfl.* 1886, p. 349.) Liliaceæ. H. bulb. This seems to be the same as **Fritillaria Sewerzowi** var. **bicolor.**

Lælia anceps, var. **Amesianum,** Sander. (*G. C.* 1888, v. 4, p. 660.) Orchidæ. A fine variety, with white sep. and pet. of firm substance; the sep. have an emerald-green dot at their apex, and the pet. are feathered with crimson at the tips. Lip rich violet-crimson, with the tube yellow inside, streaked with purple, white outside, and a central, 3-ridged, orange keel.

Lælia anceps, var. **radians,** Rchb. f. (*G. C.* 1888, v. 3, p. 200; *H. G.* 1888, p. 179; and *O.* 1888, p. 355.) Sep. and pet. deep purple with a white basal area. Lip very dark purple, with the disk of the side lobes dark orange, and a few dark purple lines.

Lælia anceps, var. **Scottiana,** Williams and Warn. (*W. O. A.* v. 7, pl. 325.) A handsome variety with rich mauve sep. and pet. and a dark purple lip with a yellow throat. Mexico.

Lælia Gouldiana, Rchb. f. (*G. C.* v. 3, p. 41; *G. and F.* 1888, v. 1, p. 4; *O.* 1888, p. 100; and *R.* v. 2, p. 23, t. 59.) A handsome plant, allied to *L. autumnalis* and *L. Crawshayana* with fusiform, 2-leaved bulbs, cuneate-oblong l. nearly a ft. long, and fl. as large as those of *L. autumnalis*. Sep. and pet. broad, acuminate, warm purple. Lip with long white side lobes edged with light purple, and a cuneate-obovate, retuse middle lobe, dark purple, white at the base, veined and spotted with darker purple, and with 3 yellow keels on the disk.

Lælia Horniana, Rchb. f. (*G. C.* 1888, v. 3, p. 770; *H. G.* 1888, p. 371; and *L.* v. 4, p. 8.) Garden hybrid.

Lælia pachystele, Rchb. f. (*G. C.* 1888, v. 4, p. 596.) Fl. as large as those of *L. elegans*. Sep., and the broader wavy pet. light rose. Lip very narrow; side lobes long and narrow, white, with light purple borders; front lobe narrow, oblong, acute, rose, with darker purple veins.

Lælia Perrinii, var. **alba,** O'Brien. (*G. C.* 1888, v. 4, pp. 446 and 565.) A white-flowered variety with a tinge of yellow on the disk of the lip.

Lælia porphyritis (*Revue de l'Horticulture Belge*, Feb. 1888; *G. C.* 1888, v. 3, p. 235.) Resembling *L. pumila* with oblong-acute sep. and pet. of a dull purplish colour, the lip with the basal $\frac{2}{3}$ rolled around the column, and a roundish, rich carmine terminal lobe.

Lælia purpurata, var. **blenheimense,** Williams and Warn. (*W. O. A.* v. 8, pl. 346.) A handsome variety with blush-rose sep. streaked with rosy-purple, deep rosy-purple pet, veined with darker, and a very dark purple lip, with a deep yellow throat veined with dark purple, and the apex rosy purple veined with dark purple. South Brazil.

Lælia purpurata, var. **Whiteana,** Rchb. f. (*G. C.* 1888, v. 3, p. 681; and *H. G.* 1888, p. 370.) A variety with a dark purple lip, without yellow in the throat.

Lælia elegans, var. **Morreniana,** Rchb. f. (*W. O. A.* v. 7, pl. 331; and *G. C.* 1888, v. 3, p. 800.) A grand variety with magenta-rose sep. and pet., and the front part of the lip rich magentacrimson, margined with lilac. Brazil.

Lælia elegans, var. **nyleptha,** O'Brien. (*G. C.* 1888, v. 3, p. 178, with pl.) A variety with large fl. 7 in. broad, faintly tinged with rose at first, changing to sulphur-yellow, the lip with a white tube, and the front lobe and tips of the side lobes crimson.

Lælia elegans, var. **Tautziana,** Rchb. f. (*G. C.* 1888, v. 3, p. 330; *H. G.* 1888, p. 227; *L.* v. 3, p. 66; and *O.* 1888, p. 295.) A large-flowered form with broad, light purple sep. and broad, cuneate-obovate; dark purple pet. Lip with white side lobes tipped with purple, and a sessile dark purple front lobe. Bulbs stout, and l. very broad and thick.

Lælia euterpe, Rolfe. (*G. C.* 1888, v. 4, p. 533.) Garden hybrid.

Lælia Eyermaniana, Rchb. f. (*G. C.* 1888, v. 4, p. 91 and 109, f. 12; *G. and F.* 1888, v. 1, p. 315; and *H. G.* 1888, p. 398.) A curious species, with a raceme of 3–4 rosy-purple fl. about 2 in. in diam. Sep. and pet. oblong, blunt. Lip 3-lobed, the front lobe wavy; disk with 3 yellow keels.

Lælia superbiens, var. **decorata,** Rchb. f. (*G. C.* 1888, v. 3, p. 200; *H. G.* 1888, p. 179; and *O.* 1888, p. 325.) A form with very narrow sep. and pet., and a very dark purple lip, with the side lobes covered by a very close, dark purple network of veins.

Lælia Timora, N. E. Br. (*G. C.* 1887, v. 2, p. 428; and *O.* 1888, p. 265.) Garden hybrid.

Lælia Tresederiana, Rchb. f. (*G. C.* 1888, v. 3, p. 136; *H. G.* 1888, p. 176; and *O.* 1888, p. 198.) Garden hybrid.

Lælia xanthina, var. **agraphis,** Rchb. f. (*G. C.* 1888, v. 4, p. 264; and *H. G.* 1888, p. 503.) A variety without purple markings on the lip.

Læliocattleya bella, Rolfe. (*G. C.* 1888, v. 3, p. 361; and *H. G.* 1888, p. 229.) Orchideæ. A synonym of **Lælia bella,** Rchb. f.

Lathyrus Sibthorpi. (*W. G.* 1888, p. 326 and 383.) Leguminosæ. H. A handsome plant with magenta-red fl.; no further description. Greece.

Leontice darwasica, Regel. (*G. C.* 1888, v. 3, p. 200; and *H. G.* 1888, p. 179.) Berberidaceæ. H. tuber with glaucous l., those on the stem trifoliolate, leaflets roundish or elliptic, fl. yellow, $\frac{3}{4}$–1 in. diam. Bokhara.

Lilium Grayi, S. Watson. (*G. and F.* 1888, v. 1, p. 19, f. 4, and p. 56; and *W. G.* 1888, p. 202.) Liliaceæ. H. Allied to *L. canadense,* but with smaller and less drooping fl., with broader segments that are not recurved. L. 4–8 in a whorl, lanceolate acute, not at all scabrous. Fl. often solitary, ascending or somewhat nodding, sub-campanulate, $1\frac{1}{2}$–2 in. long, the segments oblanceolate, abruptly acute, not re-curved, deep reddish-orange, spotted within. Alleghany Mountains.

Lilium Henryi, Baker. (*G. C.* 1888, v. 4, p. 660.) Liliaceæ. Described at the above place, but not yet in cultivation; is a fine lily, 2–3 ft. high, with close-set lanceolate l. 6–8 in. long, and a large lax corymb of 4–8 fl., 3–$3\frac{1}{2}$ in. long, yellow, dotted in the lower part with red-brown. Ichang.

Lindelofia longifolia. (*W. G.* 1888, p. 326.) Borragineæ. H. per. An ornamental herbaceous plant, 2–$2\frac{1}{2}$ ft. high, with lanceolate l. and scorpioid cymes of bright blue Forget-me-not like fl. [Is not this an error for **L. spectabilis,** Lehm.? which is the *Cynoglossum longiflorum,* Royle, figured in the *Botanical Register,* 1840, p. 50. —*N. E. B.*]

Liparis minutiflora. (*G. C.* 1888, v. 3, p. 75.) Orchideæ. [This is a provisional name given to a plant at Kew that was afterwards found to be **L. spathulata,** Lindl.—*N. E. B.*] It is an unattractive species of tufted habit, with bulbs $1\frac{1}{2}$ in. long, l. 3–6 in. long, and racemes of minute pale green fl.

Lissochilus giganteus, Welw. (*G. C.* 1888, v. 3, p. 616–7, f. 83, and v. 4, p. 353; *H. G.,* 1888, pp. 309, 400; *Ill. H.* v. 35, p. 49, pl. 53; and *O.* 1888, p. 267.) Orchideæ. See **Eulophia gigantea.**

Lonicera flavescens, Dippel. (*Gfl.* 1888, p. 7, f. 1.) Caprifoliaceæ. H. shr. with petiolate, lanceolate acuminate l. Bracts ovate acute; bracteoles connate, covering the base of the corolla. Fl. varying from sulphur-yellow to citron-yellow, glandular-hairy, segments of corolla nearly regular. Syn. *L. Webbiana* of some gardens. British Columbia.

Lonicera Webbiana, of gardens. See *L. flavescens,* Dipp.

Lonicera Webbiana, Wall. (*Gfl.* 1888, pp. 7 and 8, f. 2.) H. shr. very like *L. alpigena,* and perhaps only a form of that species. L. large oblong or elliptic-oblong, somewhat abruptly pointed. Corolla 2-lipped, yellowish-green, suffused outside with brownish-red. Himalayas.

Lourya paniculata, Baillon. (*R. H.* 1888, p. 315.) Liliaceæ. S. No description given, but said to be intermediate in character between Liliaceæ and Amaryllidaceæ. Cambodia.

Lycaste macropogon, Rchb. f. (*G. C.* 1888, v. 3, p. 200; *H. G.* 1878, p. 179; and *O.* 1888, p. 357.) Orchideæ. Allied to *L. macrobulbon*, but with larger orange-coloured fl. Sep. oblong acute, hairy at the base; pet. smaller; lip three-lobed; front lobe cuneate oblong, acute, hairy, with a broad rhomboid tubercle at its base. Costa Rica.

Lycium pallidum, Miers. (*G. and F.* 1888, v. 1, p. 340, f. 54.) Solanaceæ. H. shr. something in the way of *L. vulgare*. Branches somewhat drooping, with a few long, slender spines. L. oblanceolate, 1–2 in. long, very pale. Fl. solitary or in pairs, axillary pedicellate; corolla $\frac{3}{4}$ in. long, tubular-funnel-shaped, with broad, rounded, spreading lobes, green or tinged with purple. Berries bright red, nearly $\frac{1}{2}$ in. long. New Mexico, Arizona.

Lycoris sanguinea, Maxim. (*B. T. O.* 1888, p. 328.) Amaryllidaceæ. H. bulb, with 3–7 linear, obtuse l., $\frac{1}{6}$ in. broad, and a slender scape 1–$1\frac{1}{2}$ ft. long, bearing an umbel of 4–6 erect carmine fl. $1\frac{1}{2}$–3 in. long, with erect segments which are not crisped or undulate. Japan.

Lycoris squamigera, Maxim. (*B. T. O.* 1888, p. 327.) H. bulb, with 5–6 l., a ft. or more long, and $\frac{3}{4}$ to 1 in. broad. Scape stout, 2–3 ft. long, with an umbel of 4–7 rose-coloured fl. about 3 in. long, with shorter stamens than in *L. aurea*. Japan.

Macaranga Porteana, André. (*R. H.* 1888, p. 176, f. 36; and *G. and F.* 1888, v. 1, p. 168.) Euphorbiaceæ. S. tree of bold habit. L. peltate a ft. and a half long and nearly as broad, roundish-ovate acute; margin ciliate-toothed, wavy, upper surface with a sparse cobwebby pubescence, under side black-dotted, veins very prominent, pubescent or setulose beneath. Petioles 20–24 in. long, with large ovate-lanceolate acuminate stipules. Syn. *Mappa Porteana*, André. Philippines.

Macrotomia Benthami, D.C. (*B. M.* t. 7003; *G. C.* 1888, v. 4, p. 15; *G. and F.* 1888, v. 1, p. 299; and *H. G.* 1888, p. 398.) Boraginæ, G. or H. H. herbaceous per, 1–3 ft. high, roughly hairy. Radical l. 6–15 in. long, narrowly lanceolate, 5–7 ribbed. Stem l. smaller. Fl. in a dense leafy spike 6–12 in. long, by 2–$2\frac{1}{2}$ in. thick. Calyx-lobes about an in. long, linear. Corolla shorter than the calyx-lobes, tubular funnel-shaped, with short spreading lobes, dark brownish purple. N. W. Himalaya.

Magnolia parviflora, and var. **minor.** (*W. G.* 1888, p. 288.) Magnoliaceæ. H. A form that is smaller in all its parts. Japan.

Mappa Porteana, André. (*R. H.* 1888, p. 176.) See **Macaranga Porteana.**

Masdevallia culex, of Gardens. (*G. C.* 1888, v. 3, p. 361, 404, and 488.) Orchideæ. This is shown to be the same as **Pleurothallis macroblepharis,** Rchb. f. at the above-quoted place.

Masdevallia cupularis, Rchb. f. (*G. C.* 1888, v. 3, p. 233; *H. G.* 1888, p. 180; and *O.* 1888, p. 162.) L. small, oblong, obtuse, shining. Fl. about 2 in. long, the cup-shaped part light brown densely spotted with darker brown, glossy, inside very dark brown, pet. and lip ochreous, the lip with 3 brown lines on the front lobe, and numerous spots on the side lobes. Costa Rica.

Masdevallia Harryana, var. **decora.** Williams and Warner. (*W. O. A.* v. 8, pl. 344.) A var. with light rosy purple fl., faintly nerved with darker, and with crimson tips. Columbia.

Masdevallia Hubschii. (*L.* v. 4, p. 8.) [A mistake for **Maxillaria Hubschii.** Rchb. f.—*N. E. B.*]

Masdevallia platyrhachis, Rolfe. (*G. C.* 1888, v. 4, pp. 178 and 628.) A distinct and remarkable species, with oblanceolate-oblong l., 2–6 in. long, $\frac{3}{4}$–1 in. broad, and a flattened scape bearing a raceme of light buff coloured fl., with green nerves and orange bases to the side sep. The sep. are scarcely combined in a tube at the base, and are verrucose inside. Pet. linear, brown. Lip 3-lobed, acute, 2-keeled, light yellowish-brown. Costa Rica.

Masdevallia punctata, Rolfe. (*G. C.* 1888, v. 4, p. 323; and *H. G.* 1888, p. 505.) Allied to *M. swertiæfolia*. Tufted, l. 3–4 in. long, $\frac{1}{2}$–$\frac{3}{4}$ in. broad. Scape descending, bearing a succession of small pale greenish fl., spotted with dark purple brown, the spots more or less suffused together at the base of the fl.; the side sep. are more ochreous than the rest of the fl., and the spots minute. Tails of side sep. $1\frac{1}{2}$ lin. long, of upper sep. $\frac{1}{4}$ in. long.

Matricaria eximia grandiflora aurea, Carr. (*R. H.* 1888, p. 163.) Compositæ. H. Garden variety.

Maxillaria fuscata. (*G. C.* 1888, v. 4, p. 576–7, f. 81.) Orchideæ. A misprint for **M. fucata,** Rchb. f. noted in *Kew Bulletin* for 1888. p. 109.

Maxillaria Hubschii, Rchb. f. (*G. C.* 1888, v. 3, p. 136; *H. G.* 1888, p. 176; *O.* 1888, p. 193 and *L.* v. 4, p.

8, as *Masdevallia Hubschii*,) Orchideæ. Allied to *M. fucata*, which it resembles in appearance. Fl. white; lateral sep. rounded, pet. linear-rhombic acute, lip transverse, rhombic, with a transverse, emarginate, yellow tubercle on the disk, and some hairs behind it, the margin inside is mauve-purple, and there are some spots of the same colour outside at the base.

Medinilla magnifica, var. **rubra**. (*W. G.* 1888, p. 155.) Melastomaceæ. S. shr. A fine variety, with darker coloured fl.

Megaclinium oxyodon, Rchb. f. (*G. C.* 1888, v. 4, p. 91; and *H. G.* 1888, p. 398.) Orchideæ. A small plant with a creeping rhizome; spherical, 4-angled, dark green, punctate, wrinkled bulbs, bearing 2 lanceolate acute l. 2 in. long. ½ in broad; and a flat peduncle ⅓ in. broad, of a light green colour. Fl. like those of *M. falcatum*, but pet. longer and more arched; lip membranous, 3-lobed. Syn. *Bulbophyllum oxyodon*, Rchb. f. Madagascar.

Megaclinium scaberulum, Rolfe. (*G. C.* 1888, v. 4, p. 6; and *H. G.* 1888, p. 397.) A small plant with creeping rhizomes, tetragonal bulbs bearing 2 elliptic-oblong l., 2 in. or more long, and an erect infl. 3–4 in. long, the fl.-bearing part of the peduncle being flat and about ¼ in. broad, densely spotted and marbled with dusky purple, and bearing several fl. on each side, of a dull purple colour with the base of the sep. whitish-green spotted with purple, outside roughish. Pondoland.

Menziesia glabella, A. Gr. (*H. G.* 1888, p. 559.) Ericaceæ. H. shr., very similar to *M. globularis*, Saisb.; but the filaments are ciliate, and the seeds have appendages at each end. L. lanceolate, obtuse, glaucescent and nearly or quite glabrous beneath, sparsely hairy above, ciliolate. Fl. in terminal umbels, corolla ovoid-campanulate lurid-purple. Rocky Mountains.

Merendera caucasica, var. **ruthenica**, Max Leichtlin. (*G. and F.* 1888, v. 1, p. 138.) Liliaceæ. H. bulb, flowering before the narrow l. appear. Fl. crocus-like, bright carmine-purple. Transylvania. [N.B.—This is probably **Bulbocodium ruthenicum**, Bunge, which is the same as *B. vernum*, var. *versicolor*, Baker. *N. E. B.*]

Mesembryanthemum Brownii, Hook f. (*B. M.* t. 6985; *G. C.* 1888, v. 3, p. 305; *H. G.* 1888, p. 230; and *R. H.* 1888, p. 480.) Ficoideæ. G. Succulent. A very showy species, allied to *M. polyanthon*, and equally free flowering. Stems erect, much branched. L. ½–⅔ in. long subterete, in distant pairs, glaucous green. Fl. terminal, an inch in diam. of a brilliant orange red, or purple. South Africa.

Momordica martinicensis, D. (*W. G.* 1888, p. 473.) Cucurbitaceæ. S. annual, resembling *M. Charantia*. L. Very quick growing, much branched, with ornamental fr.

Muehlenbeckia depressa, Meissn. (*B. T. O.* 1888, p. 249.) Polygonaceæ. A misprint for **M. adpressa**, Meissn. It appears to be known in some gardens as *Philopodium rigidum*.

Musa Fehi, Bert. (*R. H.* 1888, p. 70.) S. Banana 15–20 ft. high. The stem is green with violaceous bands, and filled with an abundant violet-coloured juice. L. very large and strongly nerved. Tahiti.

Mussænda erythrophylla, Sch. and Thonn. (*Bull Cat.* 1888, p. 8, and p. 5 with fig.; *L'Hort. Int. Cat.* 1888–9, p. 51, and *W. G.* 1888, p. 330.) Rubiaceæ. S. A handsome shr., hairy in all parts. L. opposite, broadly elliptic, acute, petiolate. Fl. in terminal cymes, with large elliptic crimson bracts. Corolla an in. long, sulphur-yellow. Tropical Africa.

Narcissus Broussonetii, Lagasca. (*G. C.* 1888, v. 3, p. 169, 207, and v. 4, p. 300.) Amaryllidaceæ. An interesting species, with twisted, pale glaucous green l. 1½–2 ft. long, ½ in. broad, and an umbel of 6–9 pure white fl., ¾–1 in. in diam., very sweetly scented, remarkable for the corona being absent or very rudimentary. Morocco.

Narcissus scaberulus, Henriques. (*G. C.* 1888, v. 4, p. 296.) H. bulb. Allied to *N. rupicola*. Bulb small. L. 2., more or less prostrate, linear, 2-angled beneath, glaucous with rough edges and keels. Scape 2½–4 in. high, 1–2 flowered. Fl. small, yellow, with a cup-shaped corona, and 3 exserted stamens. Portugal.

Nepenthes Dicksoniana, Mart. (*G. C.* 1888, v. 4, pp. 543 and 541, f. 78.) Nepenthaceæ. Garden hybrid.

Nepenthes excelsior. (*L'Hort. Int. Cat.* 1888–9, p. 51.) Garden hybrid.

Nepenthes rufescens, Veitch. (*G. C.* 1888, v. 4, p. 669, f. 95.) Garden hybrid.

Nicotiana colossea, André. (*R. H.* 1888, p. 511.) Solanaceæ. H. H. or G. annual, with a stout simple stem 7–10 ft. high. L. very large, a yard long, by 20–22 in. broad, dark shining green, tinted with reddish violet when

young. Ovate acute, attenuate at the base into large wavy wings on the stout petiole. Fl. unknown. Brazil.

Nidularium striatum, Bull. (*Bull Cat.* 1888, p. 8, and 6 with fig.; *L'Hort. Internat. Cat.* 1888–9, p. 51; and *W. G.* 1888, p. 329.) Bromeliaceæ. A very ornamental plant, with a rosette of spreading broad l. 8–12 in. long, green, striped with white and creamy-yellow, the margins spinulose.

Notholæna (Nothoclæna) Muelleri. (*G. and F.* 1888, v. 1, p. 316.) Filices. S. Fern, with slender fronds a ft. long, having rounded, olive-green pinnæ, covered with brownish scales.

Nymphæna Casparyi, var. **alba,** Carr. (*R. H.* 1888, p. 300.) Nymphæaceæ. A synonym of **N. alba.**

Nymphæa Marliacea. (*G. C.* 1888, v. 3, p. 564; *Garden*, v. 33, p. 292, with plate; and *H. G.* 1888, p. 231.) H. Water-lily with canary-yellow fl. [Is the same as **N. tuberosa,** var. **flavescens,** Oliv.—*N. E. B.*]

Nymphæa Ortgiesiana, var. **Adele, N. scutifolia,** var. **rosea;** and **N. zanzibarensis,** var. **flore rubro.** (*G. C.* 1888, v. 3, p. 800.) These Water-lilies are stated by Mr. Watson at the place quoted, to be indistinguishable from each other, and to be the same as **N. stellata,** var. **purpurea.**

Nymphæa voalefoka, Marliac. (*G. C.* 1888, v. 4, p. 236.) S. aquatic. This is said to be a white variety of **N. stellata.** Madagascar?

Odontoglossum Andersonianum, lobatum, var. **Lemoinierianum,** Rchb. f. (*G. C.* 1888, v. 4, p. 378; and *H. G.* 1888, p. 549.) Orchideæ. A variety with large fl. Sep. and pet. bordered with yellow. Lip without a border, yellow at the base.

Odontoglossum Andersonianum and var. **lobatum, O. Jenningsianum,** and vars. **limbosum** and **pauciguttatum, O. Ruckerianum, O. baphicanthum, O. hebriacum,** and vars. **lineoligerum** and **aspersum, O. brassia, O. deltoglossum,** and **O. Leeainum** are referred as forms of **O. lanceans** in Reichenbachia t. 37. (*G. C.* 1888, v. 3, p. 203.)

Odontoglossum Boddærtianum, Rchb. f. (*G. C.* 1888, v. 3, p. 296; *L'Hort. Int. Cat.* 1888–9, p. 44; *H. G.* 1888, p. 227; *L.* v. 3, p. 64; and *O.* 1888, p. 321.) Allied to *O. odoratum.* Sep. and pet. lanceolate-acuminate, yellow marked with brown. Lip white, spotted with purple on the semi-oblong, upright basal lobes, front lobe with small spreading basal angles, lanceolate-acuminate, slightly toothletted; crest of two parallel 2-toothed tubercles at the base, with a few purple spots around it. Venezuela.

Odontoglossum citrosmum, var. **Devansayeanum,** Lind. (*L.* v. 3, p. 85, pl. 137.) A white flowered var. dotted on the sep. and pet. with reddish. [Seems scarcely distinct from var. **album,** Veitch.—*N. E. B.*]

Odontoglossum constrictum, var. **castaneum,** Rodigas. (*Ill. H.* 1888, v. 35, p. 83, pl. 66.) A variety with chocolate-brown sep. and pet., margined with yellow.

—— var. **majus,** Rodigas. (*Ill. H.* 1888, v. 35, p. 83.) A form with longer fl., and the base of the lip hastate. Venezuela.

Odontoglossum crispum, var. **Gouvilleanum,** André. (*R. H.* 1888, p. 132 with pl.) A variety with large white fl., having large brown blotches on the sep. and a spot or two on the pet.

Odontoglossum crispum, var. **Kinlesideanum,** Rchb. f. (*R.* v. 1, p. 103, pl. 45; and *G. C.* 1888, v. 3, p. 689.) A remarkable form with three series of crest-like teeth on the face of the pet. Sep. and pet. rosy-white, the pet. streaked with red over their central area. Lip white with a yellow disk and some red spots around it, and radiating lines at the base.

O. crispum, var. **latimaculatum,** Linden. (*L.* v. 4, p. 5. pl. 145.) A variety with broad white sep. and pet., and a broad chocolate spot on the lip. Syn. *O. latimaculatum,* Linden.

Odontoglossum cuspidatum, var. **platyglossum,** Rchb. f. (*G. C.* 1888, v. 4, p. 91; and *H. G.* 1888, p. 398.) **O. cuspidatum** is allied to *O. luteo-purpureum,* but the pet. are very acuminate, not edged, and the narrow lip is abruptly cuspidate at the apex. The sep. and pet. are dark brown, with very little yellow. The variety **platyglossum** has a broad lip. Columbia.

Odontoglossum dicranophorum, Rchb. f. (*G. C.* 1888, v. 3, p. 330; *H. G.* 1888, p. 228; and *O.* 1888, p. 357.) Raceme lax. Fl. as large as that of *O. triumphans* but with narrower segments. Sep. linear acute, yellow, with 2 large brown spots. Pet. broadest at the base, acuminate, yellow, with one large and some small brown spots. Lip oblong, elliptic at the base, front lobe linear acute, from the base to the centre is a broad depressed crest ending in two thick blades, light yellow, with a brown spot on the front lobe.

Odontoglossum excellens, var. **chrysomelanum,** Rchb. f. (*G. C.* 1888, v. 3, p. 522; and *H. G.* 1888, p. 281.) A variety with yellow fl. spotted all over.

Odontoglossum elegantius, Rchb. f. (*G. C.* 1888, v. 3, p. 200; and *H. G.* 1888, p. 179.) Near *O. Kalbreyeri.* Sep. and pet. lanceolate, acute, pale yellow marked with brown. Lip pale yellow, side lobes rectangular, middle lobe cuneate-oblong, apiculate, with a long crest between the side lobes and with two diverging, emarginate shanks at the base of the mid lobe. Ocana.

Odontoglossum Glonerianum, Linden. (*L.* v. 4, p. 17, pl. 151; and *H. G.* 1888, p. 556.) See **O. odoratum** var. **Glonerianum.**

Odontoglossum Hrubyanum, Rchb. f. (*G. C.* 1888, v. 4, p, 234; and *H. G.* 1888, p. 502.) Fl. in a lax raceme. Sep. and pet. cuneate-lanceolate, brown with the tips, and the bases of the side sep. yellow. Lip pandurate sub-acute, denticulate in front, yellowish, with a brown blotch in front of the white crest, which is 2-toothed in front, with an apiculus and a tumour on each side at the base. Peru.

Odontoglossum latimaculatum, Linden. (*L.* v. 4, p. 5, pl. 145; and *H. G.* 1888, p. 501.) See **O. crispum** var. **latimaculatum,** Lind.

Odontoglossum maculatum, var. **Duvivierianum,** Rchb. f. (*G. C.* 1888, v. 4, p. 352; and *H. G.* 1888, p. 505.) A variety with lemon-yellow sep. and pet., and a whitish-yellow lip, all of which are spotted with brown.

Odontoglossum Masereelianum, Rchb. f. (*G.C.* 1888, v. 3, p. 618; and *H. G.* 1888, p. 310.) Natural hybrid.

Odontoglossum odoratum, var. **Glonerianum,** Linden. (*L.* v. 4, p. 17, pl. 151.) A large variety with numerous fl., the sep., pet., and lip all lanceolate acuminate, white, much spotted with purple-brown. Venezuela. Syn. *O. Glonerianum.*

Odontoglossum Rossi, var. **Amesianum,** Williams and Warner. (*W. O. A.* v. 8, pl. 343.) A variety with greenish-white sep., heavily spotted and barred with brown; pet. white, with a large brown area at the base; lip white with a yellow crest. Mexico.

Odontoglossum triumphans, var. **volubile,** Carr. (*R. H.* 1888, p. 179.) This differs from the type in having narrower and longer l., a twining fl.-stem 4½ ft. or more long. with smaller, distant fl., having narrower and more acuminate segments of a paler colour. Perhaps a distinct species. Ocana.

Oncidium chrysops, Rchb. f. (*G. C.* 1888, v. 3, p. 105; *H. G.* 1888, p. 128; and *O.* 1888, p. 194.) Orchideæ. Allied to *O. bicallosum,* with short reddish l., and a reddish racemose peduncle. Sep. and pet. light brown, the pet. broader and wavy. Lip yellow, the basal lobes small, the front lobe large, reniform, emarginate, with two large tubercles at the base, 3 very small thread-like tubercles in the middle, and 3 terete ones in front; column with falcate deflexed wings.

Oncidium chrysorhapis, Rchb. f. (*G. C.* 1888, v. 3, p. 72; *H. G.* 1888, p. 127; and *O.* 1888, p. 199.) Allied to *O. cornigera.* Bulbs 3–4 in. long, terete-fusiform. L. oblong-lanceolate, acute, 6–7 in. long, 1½ in. broad, glossy dark green. Sep. and pet. broad, pale yellow, nearly covered with dark brown spots on the disk, side sep. connate. Lip with erect, linear, side lobes, lobed at the apex; and a large reniform emarginate front lobe; the claw has numerous tubercles upon it. Brazil.

Oncidium crispum sublæve, var. **ochraceum,** Rchb. f. (*G. C.* 1888, v. 4, p. 756.) A form with ochre-brown fl., without lateral crests on the sides of the middle keel of the lip.

Oncidium detortum, Rchb. f. (*G. C.* 1888, v. 3, p. 392; and *H. G.* 1888, p. 229.) Something in the way of O. serratum, with a very long inflorescence. Sep. shortly clawed and eared, cuneate-oblong, acute, wavy, light brown, the upper one yellowish at the apex. Pet. with shorter claws, wavy, yellow with brown spots. Lip with spreading triangular side lobes, and an oblong, acute front lobe, the crest is formed of several keels and teeth.

Oncidium Jonesianum, var. **flavum,** Rchb. f. (*G. C.* 1888, v. 4, p. 234; *W. O. A.* v. 8, pl. 360; and *H. G.* 1888, p. 502, as var. *flavens.*) A variety with yellowish green spots on the sep. and pet., and yellowish lip and column.

Oncidium Kramerianum, var. **resplendens,** Rchb. f. (*G. C.* 1888, v. 3, p. 360; and *H. G.* 1888, p. 229.) A large, brightly coloured variety, with no brown margin to the wavy lip, which has a longer crest, white in the middle with purple-mauve and purple-brown spots and bars.

Oncidium Lietzei, var. **aureo-maculatum,** Regel. (*Gfl.* 1888, p. 441, t. 1279; and *H. G.* 1888, p. 462.) A variety with the fl. much spotted and barred with brown.

—— Var. **bicolor,** Regel. (*Gfl.* 1888, p. 441.) A small flowered form, with brown fl. variegated with yellow.

Oncidium maculatum, var. **psittacinum,** Rchb. f. (*G. C.* 1888, v. 4, p. 378; and *H. G.* 1888, p. 549.) A variety in which the sep. and pet. of the yellow fl. are much blotched.

Oncidium Mantini, God.-Leb. (*O.* 1888, p. 47 with pl.; *G. C.* 1888, v. 3, p. 235; and *R. H.* 1888, p. 98.) Something in the way of *O. Gardneri.* Bulbs ovoid, with two strap-shaped emarginate l. and a raceme of large fl. Upper sep. and the very large pet. chocolate-brown, with yellow borders spotted with chocolate-brown. Side sep. united at the base ?, chocolate-brown with yellow bars. Lip with a narrow oblong base, and a very large, reniform, lobulate front lobe, yellow spotted with bright reddish-brown. Brazil.

Oncidium murinum, Rchb. f. (*G. C.* 1888, v. 3, p. 619.) A pretty, but small flowered species, with a large panicle of numerous yellow fl., having the columns of a dull crimson-purple. Lip triangular, sessile, fleshy, with 2 roundish crests on the disk.

Oncidium orthotis, Rchb. f. (*Ill. H.* v. 35, p. 91, pl. 69.) A small but interesting species, with peculiarly shaped fl. Bulbs small, compressed, ovate, with one cuneate-oblong l. 1½–2 in. long. Fl.-stem about 9 in. long, with 5–6 branches, which terminate in a single fl. about ¾ in. in diam. and bear 1 or 2 abortive fl. Sep. and pet. linear-lanceolate acute, yellow barred with brown; upper sep. reflexed, lateral sep. hanging straight down; pet. widely spreading. Lip broadly cordate, with a short triangular acute point, and a crest of two series of tubercles in groups of 3, yellow with brown markings.

Oncidium Papilio, var. **majus,** Linden. — ? of Rchb. f. (*L.* v. 3, p. 87, pl. 138.) Merely a large flowered variety. [This is identical with var. **Eckhardti,** Linden.—*N. E. B.*]

Oncidium robustissimum, Rchb. f. (*G. C.* 1888, v. 4, p. 352; and *H. G.* 1888, p. 505.) Allied to *O. pulvinatum, sphegiferum,* &c., but with stout straight branches to the panicles, and larger fl. Sep. and pet. brown at base, yellow at apex. Lip yellow with brown stripes; side lobes rounded, serrate. Brazil.

Onosma pyramidalis, Hook. f. (*B. M.* t. 6987; *G. C.* 1888, v. 3, p. 305; *G. and F.* 1888, v. 1, p. 60; *H. G.* 1888, p. 230; and *R. H.* 1888, p. 480.) Borragineæ. G. or H. H. per. of ornamental character, with a large dense rosette of linear-lanceolate acute l., 10–12 in. long, and a stout, branching, leafy fl.-stem, 1½–2 ft. high. Fl. in short, dense bracteate, scorpiod, drooping racemes. Calyx lobes linear-lanceolate, very spreading. Corolla urceolate, bright scarlet. Except the corolla the whole plant is hispid. Kumaon.

Origanum hybridum, Mill. (*G. C.* 1888, v. 3, p. 232, f. 37.) Labiatæ. H. per. this is the ornamental plant known in gardens as *O. pulchellum* and *O. Tournefortii.* Levant.

Ornithochilus fuscus, Wall. (*G. C.* 1888, v. 4, p. 210) Orchideæ. A small plant with fleshy oblong l. about 4 in. long, unequally 2-lobed at the apex. Racemes axillary, pendant, with numerous, small, brownish-yellow fl. marked with purple lines. Lip 3-lobed, the middle lobe erect, horse-shoe shaped, fringed, reddish-purple, spur conical. Burma. Syn. *Æërides difforme,* Wall.

Oxybaphus californica, Benth. and Hk. f. (*Gfl.* 1888, p. 75, t. 1266, f. 2; and *H. G.* 1888, p. 175.) Nyctagineæ. H. per. 1–2 ft. high, procumbent at the base, viscid on the stem and l. L. opposite, petiolate broadly ovate, obtuse or subacute, subcordate at the base. Fl. solitary, axillary, funnel-shaped, purple, on pedicels about ½ in. long. California.

Pachystima myrsinites, Raf. (*H. G.* 1888, p. 559; and *W. G.* 1888, p. 440.) Celastrineæ. H. shr. formerly known as *Myginda myrtifolia,* Nutt.

Palicourea nicotianæfolia, *Cham. and Schl.* (*B. M.* t. 7001; *G. C.* 1888, v. 3, p. 722; and *H. G.* 1888, p. 369.) Rubiaceæ. S. shr. of ornamental character. L. opposite, petiolate, lanceolate acuminate, 5–9 in. long, bright green, the mid-rib and nerves yellowish above, purplish beneath. Panicle terminal, rather narrow, 4–7 in. long; the peduncle and branches red, pubescent; corolla tubular, 5-toothed, ½ in. long, greenish-yellow. Fruit compressed, ⅛ in. diam. violet. Brazil. Syn. *P. discolor,* of gardens.

Panax crispatum, Bull. (*Bull Cat.* 1888, p. 9; *L'Hort. Int. Cat.* 1888–9, p. 52.) Araliaceæ. S. shr. of dwarf compact habit. L. triangular, pinnate, with several pairs of overlapping leaflets, and a terminal one, all deeply incised and toothed on the margin. Brazil.

Panax lepidum, Bull. (*Ball Cat.* 1888, p. 9; *L.Hort. Int. Cat.* 1888–9, p. 52.) S. shr. of compact dense habit.

L. biternately divided, the leading division largest, pinnules of the secondary divisions obliquely obovate, with the inner sides of the two lateral ones almost covering the small central pinnule which is deflexed and sometimes almost rudimentary, the margins are deeply incised and spinosely toothed. Brazil.

Panax nitidum, Bull. (*Bull Cat.* 1888, p. 9; *L'Hort. Int. Cat.* 1888–9, p. 52.) S. shr. of dense compact habit. L. roundish-obovate, toothed and slightly spinose, the front part sometimes with two or more incisions. Brazil.

Panax ornatum, Bull. (*Bull Cat.* 1888, p. 9; *L'Hort. Int. Cat.* 1888–9, p. 52.) An ornamental S. shr. with long pinnate l., the leaflets being narrow lanceolate, and deeply and bluntly toothed on the margins. Brazil.

[**Pandanus labyrinthicus,** Kurz. Pandaneæ. This is a plant noted in *G. C.* 1888, v. 4, p. 631 under the erroneous names of *P. ceramicus*, and *P. ceramensis*. It has a stem of $1\frac{1}{2}$ in. thick, bearing a crown of linear l. about 3 ft. long, by $1\frac{1}{2}$ in. broad, spiny on the margins and on the apex of the keel Peduncle a ft. long, bearing a cluster of ellipsoidal cones, about $2\frac{1}{2}$ in. long, by $1\frac{3}{4}$ in. thick, of a scarlet colour when ripe.—*N. E. B.*]

Papaver Pollaki, Kern. (*W. G.* 1888, p. 272.) H. per. something in the way of *P. orientale*, but with more finely cut l., and smaller dark cherry-red fl. Persia.

Paphinia cristata, var. **Modiglianiana,** Rchb. f. (*G. C.* 1888, v. 3, pp. 72 and 235; *H. G.* 1888, p. 127; *L.* v. 3, p. 45, pl. 117; and *O.* 1888, p. 200.) Orchideæ. A var. with whitish fl. Syn. *P. Modiglianii.* (*B. T. O.* 1888, p. 58.) Brazil.

Passiflora kewensis. (*Jard.* 1888, p. 201; and *G. and F.* 1888, p. 292.) Passifloraceæ. Garden hybrid.

Passiflora Miersii, Masters. (*G. C.* 1888, v. 4, p. 352, f. 46; and *H. G.* 1888, p. 505.) S. Climber. A small but pretty species, with ovate-lanceolate entire l., cordate at the base, claret-coloured beneath. Fl. about 2 in. in diam., white flushed with pink, the outer coronal threads white, barred with purple at the base, inner threads violet or deep purple. Brazil.

Pavetta natalensis, Sond. (*Bull Cat.* 1888, p. 9, and 4 with fig.; *L'Hort. Int. Cat.* 1888–9, p. 52.) Rubiaceæ. An ornamental S. shr. with lanceolate-oblong, acute, dark green, opposite l., and large hemispherical cymes of Ixora-like, white fl., with long exserted styles. Natal.

Pennisetum longistylum, var. **violaceum.** (*W. G.* 1888, p. 436.) Gramineæ. H. annual. An ornamental grass, with long metallic-violet awns to the spike.

Pentapera sicula, Klotzsch. (*B. M.* t. 7030; *G. C.* 1888, v. 4, p. 670; and *H. G.* 1888, p. 505.) Ericaceæ. G. shr. 1–2 ft. high, with linear heath-like l. $\frac{1}{3}$–$\frac{1}{2}$ in. long, and terminal, 4–5-flowered umbels of nodding, urceolate, white fl., $\frac{1}{3}$ in. long, with linear, spreading, pink calyx segments. Stamens 5, included. Ovary pubescent. Sicily. Syn. *Erica sicula*, Guss.

Pentstemon Menziesii, var. **Scouleri,** A. Gray. (*H. G.* 1888, p. 560; and *W. G.* 1888, p. 560.) Scrophulariaceæ. H. per. This is *P. Scouleri* Dougl., now referred as a variety of *P. Menziesii.*

Pentstemon rotundifolius, A. Gray. (*G. C.* 1888, v. 4, p. 264–5, f. 31; *G. and F.* 1888, v. 1, p. 472, f. 73; and *H. G.* 1888, p. 503.) H. per. herb of attractive appearance, about 2 ft. high, with opposite, roundish or broadly ovate, glaucous l., those on the stem sessile; and laxly paniculate, bright brick-red, tabular fl., about 1 in. long. Mexico.

Peperomia argyreia, var. **foliis variegatis.** (*W. G.* 1888, p. 297, pl. 3.) Piperaceæ. Garden variety.

Perilla arguta, var. **atropurpurea.** (*W. G.* 1888, p. 340.) Labiatæ. A synonym of **P. nankinensis.**

Peumus fragrans, Pers. (*B. M.* t. 7024; and *G. C.* 1888, v. 4, p. 573.) Monomiaceæ. S. evergreen shr. This is the plant known as *Boldoa fragrans.*

Phaiocalanthe Sedeniana. (*G. C.* 1888, v. 3, p. 136; *H. G.* 1888, p. 176; and *O.* 1888, p. 322.) Orchideæ. A synonym of **Phaius Sedenianus,** Veitch.

[**Phaius candidissimus,** N. E. Br. Orchideæ. Much in the way of *P. Marshalliana* with a nodding infl. Bracts greenish, longer than the ovaries. Fl. entirely white. Lip trifid, the side lobes toothed in front, the front lobe crested with filiform processes; spur inflated, and 2-lobed. Syn. *Thunia candidissima,* Rchb. f. (*G. C.* 1888, v. 4, p. 34.)—*N. E. B.*]

[**Phaius Marshalliana,** var. **purpurata,** N. E. Br. A variety with a 3-lobed lip white, spotted with purple, with 5 yellow keels across the disk, and numerous yellow filiform processes; outside the front part has numerous

bright purple veins. Syn. *Thunia Marshalliana*, var. *purpurata*, Rchb. f. (*G. C.* 1888, v. 4, p. 62.)—*N. E. B.*]

[**Phaius Marshalliana**, var. **triloba**, N. E. Br. A variety with a broad 3-lobed lip, having dark reddish-brown veins, and 12 darker rows of toothed crests. Syn. *Thunia Marshalliana*, var. *triloba*, Rchb. f. (*G. C.* 1888, v. 4, p. 62.)—*N. E. B.*

Phaius Sedenianus, Veitch. (*G. C.* 1888, v. 3, p. 136, under *Phaiocalanthe Sedeniana*.) Garden hybrid.

Phalænopsis Buyssoniana, Rchb. f. (*G. C.* 1888, v. 4, p. 295; *R. H.* 1888, p. 434; and *H. G.* 1888, p. 504.) Orchideæ. A handsome species very similar to *P. Regnieriana*, but brighter in colour, and differing in having the median processes on the stalk of the lip filiform-linear, instead of triangular. Sep. and pet bright purple, the side sep. bordered inside with white. Lip bright scarlet, the side lobes ochreous outside, with scarlet lines.

Phalænopsis denticulata, Rchb. f. (*G. C.* 1888, v. 3. p. 296; *L.* v. 3. p. 66; *H. G.* 1888, p. 227; and *O.* 1888, p. 164.) Allied to *P. sumatrana*, var. *Mariæ*. L. green, 6–7 in. long, 2–3 in. broad. Sep. and pet. oblong-lanceolate, acute, white with brown spots. Lip with ligulate, toothletted side lobes, having a tubercle at the base and an oblique transverse keel outside, white with yellowish tips; front lobe ligulate, acute, concave, toothletted, with a long central keel very high towards the apex, and two forked tubercles on the disk, white with 3 mauve lines on each side.

Phalænopsis gloriosa, Rchb. f. (*G. C.* 1888, v. 3, p. 554; and *H. G.* 1888, p. 308.) Seems to be a slight variety of P. amabilis with a narrow, deep, 2-toothed crest.

Phalænopsis Leda, Rolfe. (*G. C.* 1888, v. 3. p. 457; and *H. G.* 1888, p. 280.) Garden hybrid.

Phalænopsis Luddemanniano-amabilis, Rolfe. (*G. C.* 1888, v. 3, p. 331; and *H. G.* 1888, p. 228.) Garden hybrid.

Phalænopsis Stuartiana, var. **bella**, Rchb. f. (*G. C.* 1888, v. 3, p. 200; and *H. G.* 1888, p. 179.) A pretty variety, with red linear spots on the side lobes of the lip, and large purple-brown blotches on the middle lobe.

Phalænopsis sumatrana, var. **Kimballiana**, Rchb. f. (*G. C.* 1888, v. 4, p. 6; and *H. G.* 1888, p. 397.) A fine variety, with broad bright yellow sep. and pet. barred with red, and a light ochreous lip with an orange tubercle on each side lobe.

Phaseolus derasus, Schranck. (*W. G.* 1888, p. 126.) Lequminosæ. S. climber, glabrous or nearly so. L. ovate-acuminate. Fl. greenish-white in pedunculate few-flowered racemes. Seeds black, with a white hilum. Brazil.

Philadelphus Coulteri, S. Wats. (*G. and F.* 1888, v. 1, p. 232, f. 40; *R. H.* 1888, p. 385; and *W. G.* 1888, p. 440.) Saxifragaceæ. H. shr., with slender drooping branches; ovate-lanceolate, serrate l., white-pubescent beneath; and solitary white fl. about 1 in. in diam. Northern Mexico.

Philadelphus Lemoinei. (*W. G.* 1888, p. 124.) H. shr. Garden hybrid.

Philadelphus microphyllus, A. Gr. (*G. and F.* 1888, v. 1, p. 248; and *G. C.* 1887, v. 2, p. 156, f. 36.) H. A twiggy shr. with slender stems 2–3 ft. high; broadly ovate, hairy l., $\frac{1}{2}$ in. long, shining green, pale beneath; and small, white, very fragrant fl. New Mexico.

Philodendron Corsinianum. (*B. T. O.* 1888, p. 211.) Araceæ. Garden hybrid.

Philopodium rigidum, of Gardens. See **Muehlenbeckia depressa.**

Phlox adsurgens, Torr. (*G. and F.* 1888, v. 1, p. 66, f. 11.) Polemoniaceæ. H. An ornamental plant with opposite, broadly ovate or ovate-lanceolate, acute l., and lax few-flowered cymes of long-tubed, rose-coloured fl. Oregon and N. W. California. [At the above place it is not stated if this plant is in cultivation.—*N. E. B.*]

Phlox Drummondii, vars. **cuspidata**, Wittm., and **fimbriata**, Wittm. (*Gfl.* 1888, p. 1–3, t. 1264.) H. annuals. In both varieties the corolla lobes are 3-toothed, but in var. **cuspidata** the middle tooth is 4–5 times as long as the side teeth, whilst in var. **fimbriata** it is only about twice as long. Syn. *Drummondi*, vars. *stellata*, and *laciniata*, Grilli. (*B. T. O.* 1888, p. 119, f. 18–19, and p. 243.)

Phlox nana, Nutt. (*G. and F.* 1888, v. 1, p. 413, f. 66.) H. ? per. of dwarf habit, 6–9 in. high. A very pretty species, with spreading, linear-attenuate l. 2–3 in. long, and lax corymbs of red, white, or yellow fl., an inch in diam., with elliptic, entire corolla lobes. Texas.

Phormium Hookeri, Gunn. (*B. M.* t. 6973; *H. G.* 1888, p. 124; *G. and F.* 1888, v. 1, p. 48; *R. H.* 1888, p. 479.)

Liliaceæ. H. per. resembling *P. Colensoi*, with flaccid ensiform l., fissured at the apex, of a pale green without a coloured margin; and a tall panicle of slightly curved fl., with the outer segments yellow, and the inner greenish; filaments red. New Zealand.

Phillyrea decora, Boiss. and Bal. (*G. C.* 1888, v. 4, p. 672, f. 96.) Oleaceæ. H. shr. The above is the earliest name for *P. Vilmoriniana*, Boiss.

Phytolacca decandra albo-variegata. (*Jard.* 1888, p. 59, with fig.) Phytolaccaceæ. Garden var.

Picea pungens, var. **argentea,** Engelm. (*H. G.* 1888, p. 70.) Coniferæ. H. This is the corrected name for the tree known in gardens as *P. Parryana* var. *glauca.*

Pilocereus Bruennowii, Haage. (*H. G.* 1888, p. 85, with fig.) Cactaceæ. G. or S. succulent with columnar, 9–12 angled stems; something in the way of *P. fossulatus*, but with stronger and longer spines, and stouter and longer hairs. Bolivia.

Pilocereus Hoppenstedti, Roezl. (*H. G.* 1888, p. 8, with fig.) G. or S. succulent, with columnar, 18–20 angled stems, the angles rounded, with deep acute grooves between them. Pulvini close set, white tomentose, outer spines about 20, unequal in length, the lower ones longest, grayish white, central spines 6–8, brownish, stout at the base, the lower ones as much as 2½ in. long. Mexico.

Pinanga lepida, Bull. (*Bull Cat.* 1888, p. 9; *L'Hort. Int. Cat.* 1888–9, p. 52.) Palmæ. S. An elegant palm with short rufescent petioles, and the blade pinnately divided into unequal segments. Young leaves brownish-red, changing to deep green, faintly mottled with darker. East Indies.

Pinus ponderosa, var. **scopulorum,** Engelm. (*H. G.* 1888, p. 559.) Coniferæ. H. tree. A variety with shorter l. and smaller cones. Rocky Mountains.

Piper rubrovenosum, Rodigas. (*Ill. H.* 1887, p. 91, pl. 33; and *H. G.* 1888, p. 124.) Piperaceæ. S. An ornamental climber, with cordate-acuminate, bright green l., mottled above, with rosy along the course of the veins, green beneath. [This seems scarcely to differ from the plant I described as **Piper Ornatum.**—*N. E. B.*]

Pirus. See **Pyrus.**

Pitcairnia Darblayana, Sallier. (*Jard.* 1888, p. 201; and *W. G.* 1888, p. 383.) Bromeliaceæ. Garden hybrid.

Pitcairnia jaliscana, S. Wats. (*G. and F.* 1888, v. 1, p. 195.) An attractive species with a bulb-like base, composed of very short, broadly sheathing l., armed with reflexed spines on the margins. L. linear, erect, unarmed, scurfy beneath. Fl.-stem glabrous, bracteate. Fl. numerous, pedicellate; bracts and calyx, deep rose-coloured; corolla nearly 2 in. long, scarlet. Mexico. Perhaps not in cultivation.

Pitcairnia Palmeri, S. Wats. (*G. and F.* 1888, v. 1, p. 209, and 211 f. 38.) A small species, with a bulbous base formed of broad leaf-sheaths, and a few filiform or linear l., those on the barren shoots sparsely hairy, those on the flowering shoot, barbed. Fl. stem with slender subulate entire l. Fl. in a lax raceme, bracts narrow, half as long as the recurved pedicels. Corolla 1¼ in. long, light red. Mexico.

Pithecoctenium buccinatorium, DC. (*B. T. O.* 1888, p. 272, t. 11.) Bignoniaceæ. This is the handsome S. climber, figured by Lindley in the Botanical Register, t. 1301 as *Bignonia cherere*, but is distinct from *B. cherere*, Aubl.

Pittosporum phillyræoides, DC. (*B. T. O.* 1888, p. 328, t. 13.) Pittosporeæ. A graceful G. shr. with slender drooping branches, linear l., 2–3 in. long, and axillary yellow fl. about ⅓ of an in. in diam. Australia.

Pleurothallis platystachys, Regel. (*Gfl.* 1888, p. 459.) Orchideæ. Tufted. L. leathery, lanceolate, 2-toothed at apex. Scape as long as the l., with about 4 keeled, imbricated, dull green bracts; and a compressed spike of small green fl., dotted with purple. Brazil.

Pleurothallis punctulata, Rolfe. (*G. C.* 1888, v. 4, p. 756.) Rather a pretty species. L. 3½ in. long, 1 in. broad, lanceolate oblong, subacute, fleshy, glaucous below, on stems about 2 in. high. Peduncle 2½ in long. Fl. an in. long, light yellow, spotted with purple-brown. Upper sep. lanceolate-oblong, acute; side sep. united into a concave oblong body, bifid at apex. New Grenada.

Pleurothallis Roezli, Rchb. f. (*O.* 1888, p. 80, with pl.) An attractive species, with large purple-brown fl. L. 3–5 in. long, 1–1¼ in. broad, oblong-lanceolate, 2-toothed at the apex. Peduncle rather longer than the l., the flower-bearing part drooping. Fl. 5–6 in a one-sided raceme, about 1 in. long, the upper sep. nearly parallel with the

lower sep., which are united to their apex, so that the fl. is open but a little way. Columbia.

Platycarya strobilacea, Sieb. and Zucc. (*R. H.* 1888, p. 88, f. 18–19.) Juglandeæ. This is an older name for *Fortunæa chinensis,* Lindl., a very curious H. H. shr.

Polygonum baldschuanicum, Regel. (*Gfl.* 1888, p. 409, t. 1278; and *H. G.* 1888, p. 461.) Polygonaceæ. H. per. of climbing habit, very free-flowering and ornamental. L. 1–1½ in. long, cordate-ovate, acute, petiolate. Fl. in large terminal panicles, bright pink. Eastern Buchara.

Polypodium californicum, Kaulf. (*G. and F.* 1888, v. 1, p. 341.) Filices. H. H. on H. Fern about 9 in. high. Fronds pinnate, lanceolate or ovate-lanceolate, the segments narrow, oblong, acute, serrate, placed rather close together. California.

Polystachya leonensis, Rchb. f. (*G. C.* 1888, v. 3, p. 648.) Orchideæ. An unattractive species, with thick velvetty roots, depressed-globose bulbs, ½ in. in diam., arranged on the rhizome so as to touch one another, velvetty scape and pedicels, and racemose light green fl. with a white lip, covered with a white meal on the central keel and basal part. Sierra Leone.

Populus Steiniana, Bornm. (*Gfl.* 1888, p. 173, f. 37–38, and p. 396; and *G. and F.* 1888, v. 1, p. 139.) Salicaceæ. Garden hybrid.

Portenschlagia ramosissima, Vis. (*W. G.* 1888, p. 339.) Umbelliferæ. H. per. with ternately decompound l., cut into linear ultimate segments, ½–1 in. long. Stem verticillately branched; umbels compound, dense; fl. yellowish-white; fr. shortly hairy. Dalmatia.

Prasophyllum Laufferianum, Maury. (*Journal de Botanique,* 1888, p. 302–3, with fig.) Orchideæ. G. terrestrial Orchid, with one slender terete l. channelled down one side, and a spike of several fl. about an in. in expanse. Sep. linear-lanceolate, dusky green. Lip. ovate-oblong, acute, recurved, with wavy edges, and two wavy folds running parallel with the margin and meeting near the apex. Australia.

Primula geraniifolia, Hook. f. (*B. M. t.* 6984; *G. C.* 1888, v. 3, p. 305; *H. G.* 1888, p. 230; and *R. H.* 1888, p. 480.) Primulaceæ. H. per. A pretty Primrose, with roundish-cordate, obtuse, bluntly lobed, hairy l., on distinct hairy petioles; and a several flowered umbel of bright purple fl. ½ in. in diam., on long hairy scapes. Eastern Himalayas.

Primula suffrutescens, Gray. (*G. C.* 1888, v. 4, p. 38.) H. alpine primrose, with creeping stems and rosettes of evergreen, thick, leathery, spathulate l., coarsely toothed at the apex. Scapes 3–4 in. high, bearing 3–7 deep maroon-purple fl., with a yellow eye, about an inch in diam. Sierra Nevada.

Prunus Capuli, Cav. (*R. H.* 1888, p. 137, f. 30.) Rosaceæ. H. shr. or small tree, with deciduous oblong or elliptic-oblong, acute, finely-toothed l., glaucous green beneath; and terminal racemes of white fl. similar to those of *P. padus.* Fr. red, pulpy, resembling a small cherry. The Capollin or Capulinos of Mexico.

Prunus Jacquemontii, Hk. f. (*B. M. t.* 6976; *G. and F.* 1888, v. 1, pp. 48, 200; *H. G.* 1888, p. 124, and *R. H.* 1888, p. 479.) H. shr. with slender glabrous branches; ovate, ovate-lanceolate, or elliptic, acute, serrate l., and clusters of 2–3 pink fl., about ⅓ in. in diam., appearing with the l. Calyx tubular, ⅛–¼ in. long, glabrous. N. W. Himalaya.

Prunus Maureri, Zabel. (*Gfl.* 1888, p. 124.) Garden hybrid.

Prunus Miqueliana, Maxim? (*G. and F.* 1888, p. 196 and 199, f. 37.) H. tree. This is said to be confounded in gardens with *P. pendula* Maxim., but the bark is darker, the fl. are corymbose on short leafy shoots, the pedicels bracteate at the base, and as well as the shorter and paler calyx sparsely hairy, the pet. are more narrowly obovate, and of a paler pink or nearly white, the l. are broader, thinner, and more deeply and irregularly cut, pubescent beneath, as are the petioles and young shoots, and have 2 orange glands at their base.

Ptarmica grandiflora, var. **flore pleno,** Carriere. (*R H.* 1888, p. 573.) Compositæ. H. per. A double flowered form of **Achillea grandiflora,** Marsch.

Puya lanuginosa, R. and P. (*G. C.* 1888, v. 4, p. 411.) Bromeliaceæ. S. A rather smaller species than *P. chinensis,* with recurved, toothed l., silvery beneath, and a fl.-stem 3–4 ft. high. Fl. densely packed; calyx clothed with brown woolly hairs; corolla 2 in. long, pale sea-green. Peru.

Pyrus Halliana, and **P. Parkmanni,** of gardens. (*G. and F.* 1888, v. 1, p. 152; and *W. G.* 1888, p. 123.) Rosaceæ. These names represent a semidouble form of **P. floribunda.**

Pyrus heterophylla, Regel and Schmalh not of Steud. (*H. G.* 1888, p. 560.) L. entire on laciniate, or intermediate. Central Asia.

Quercus Daimio, var. **pinnatifida.** (*W. G.* 1888, p. 287.) Cupuliferæ. H. tree. A form with very large pinnatisect l., attaining a ft. or more in length. [This is probably a laciniate form of **Q. dentata.**—*N. E. B.*]

Quercus georgiana, M. A. Curtis. (*G. and F.* 1888, v. 1, p. 465.) H. An ornamental and very rare shr., the foliage turning scarlet in autumn. It forms a low spreading bush, and has long-stalked, somewhat obovate l., cuneate at the base, with 3–5 entire, acute or obtuse lobes, with deep or shallow sinuses, very smooth; and with smooth, shining, saucer-shaped cups, and ellipsoid acorns. Georgia.

Quesnelia Enderi, Gravis and Wittm. (*Gfl.* 1888, p. 195, f. 41–43.) Bromeliaceæ. This is a synonym of **Q. lateralis,** Wawra, and is the same as *Billbergia Enderi,* Regel.

Quesnelia Wittmackiana, Regel. (*Gfl.* 1888, p. 497, t. 1281, f. 2.) A distinct looking plant, with stiff, erect, channelled l., 3–4½ ft. long, with small spines on the edges, light green, transversely banded with whitish on the back. Fl. stem shorter than the l., slender, reddish, bracteate. Spike short, composed of about 4 clusters of 2–3 fl., with red calyces and dark blue pet. South Brazil.?

Rhododendron balsaminæflorum, var. **carneum,** Veitch. (*Veitch Cat.* 1888, p. 12, and p. 7 with fig.) Ericaceæ. Garden hybrid

Rhododendron brachycarpum, G. Don. (*G. and F.* 1888, v. 1, p. 292, f. 46.) H. shr. A handsome, tall growing, wide branching species, resembling *R. catawbiense* in general appearanee. L. oblong obtuse, shortly mucronate, with a rusty, silky pubescence beneath. Fl. numerous, 1½–1¾ in. in diam., in large terminal clusters, pale yellow, or cream colour dotted with green at the base of the upper lobes of the corolla. Japan.

Rhododendron Championi, Hook. (*G. C.* 1888, v. 3, p. 620.) G. Shr. with leathery l., about 5 in. long, by 2 in. broad, covered on both sides with glandular hairs; and handsome white fl. spotted with yellow in the upper part, about 4 in. in diam., with spreading segments. China.

Rhododendron Colletianum, Ait. and Hemsl. (*B. M.*, t. 7017; *G. C.* 1888, v. 3, p. 620, and v. 4, p. 297, f. 38, and p. 416; and *H. G.* 1888, pp. 504, 553.) H. shr. L. oblong-lanceolate, acute at both ends, coriaceous, opaque green above, pale brownish-lepidote beneath, 1½–3 in. long. Fl. nearly an in. long, funnel-shaped, with broadly oblong lobes, pure white, arranged in dense terminal umbels. Afghanistan.

Rhododendron jasminiflorum, var. **carminatum,** Veitch. (*Veitch Cat.* 1888, p. 13, and p. 8, with fig.) Garden hybrid.

Rhododendron kewensis, W. Watson. (*G. C.* 1888, v. 3, p. 620.) Garden hybrid.

Rhododendron Vaseyi, A. Gray. (*G. and F.* 1888, v. 1, p. 376, f. 60, and p. 440; and *G. C.* 1888, v. 4, p. 569.) H. A beautiful shr., growing 15–18 ft. in height, but flowering freely when only a ft. high. L. oblanceolate, acute, cuneate at the base, 2½–3 in. long, not expanded when flowering. Fl. in lax umbels, bright clear pink, dotted with darker at the base of the upper lobes of the corolla, which is about 1½ in. in expanse. Carolina.

Rodriguezia Bungerothi, Rchb. f. (*L.*, v. 3, p. 65, pl. 127; *G. C.* 1888, v. 3, pp. 264, 561; *H. G.* 1888, p. 226; *L'Hort. Int. Cat.* 1888–9, p. 45; and *O.* 1888, p. 163.) Orchideæ. Much in the way of *R. secunda.* Bulbs 1½ in. long, compressed, oblong. L. 2–3, strap-shaped, acute, 5–6 in. long by 1 in. broad. Fl. in a dense raceme, bright carmine-rose according to the plate, purplish according to description. Sep. and pet. elliptic-ovate. Lip cuneate-obovate, emarginate. Spur rather stout, solid at the base. Venezuela.

Rosa alba, var. **suaveolens,** Dieck. (*W. G.* 1888, p. 561.) Rosaceæ. No description. One of the kinds yielding Attar of Roses. Kazanlick.

Rosa Beggeriana, Schrenk. (*G. and F.* 1888, v. 1, p. 333.) H. shr., 4–6 ft. high, flowering all the summer. Branches slender, with a few recurved spines and no prickles. L. with 3–4 pairs of small, elliptic, serrate leaflets. Fl. small, white, in several-flowered corymbs. Fruit not much larger than a pea, at first orange-red, deep purple-black when ripe. Afghanistan.

Rosa byzantina, Dieck. (*H. G.* 1888, p. 561.) No description. Yields Attar of Roses. Constantinople.

Rosa Fendleri, Crép. (*H. G.* 1888, p. 560.) G. Rose, resembling *R. blanda,* and probably only a slight form of that species. Mexico.

Rosa gallica, var. **trigintipetala,** Dieck. (*W. G.* 1888, p. 561.) No description. Yields Attar of Roses. Kazanlick.

Rosa gigantea, Crépin. (*G. C.* 1888, v. 4, p. 122; *G. and F.* 1888, v. 1, p. 321; *Gfl.* 1888, p. 516; and *H. G.* 1888, p. 456.) G. or S. A very fine Rose, something in the way of *R. chinensis*, Jacq., but larger, and differing in having solitary white fl. 5 in. in diam., with entire outer sep. and unarmed floral branches. Burmah, Siam.

Rosa minutifolia, Engelm. (*G. and F.* 1888, v. 1, p. 102, f. 22.) H.? or H. H. Rose, of compact much branched habit, armed with numerous straight spines, with very small l., of 5–7 deeply-toothed leaflets, and small solitary pink or white fl. on short spurs along the branches. California.

Rosa Niphetos, var. **striata.** (*B. T. O.* 1888, p. 157.) Garden variety.

Rosa nutkana, Presl. (*G. and F.* 1888, v. 1, p. 449, f. 70, and *H. G.* 1888, p. 560.) H. A showy Rose of stout habit, with rather broad foliage; usually armed at the base of the l. with broad flat spines, and occasionally with scattered prickles. L. glabrous or pubescent. Fl. large in lax corymbs, peduncles and ovaries smooth, unarmed. Fr. globose, ½ in. diam., bright scarlet. N.W. America.

Rosa omissa, Desegl. (*H. G.* 1888, p. 560.) H. Allied to *R. mollis*, with moderate-sized leaflets, glandular beneath. The fl. are rose-coloured, and the fr. obovoid or pear-shaped, glabrous. France.

Rosa phœnicea, Boiss. (*H. G.* 1888, p. 560.) H. An ornamental Rose with climbing stems, armed with scattered hooked prickles, pinnate l. with 3–5 elliptic, obtuse, coarsely-toothed leaflets, and corymbose panicles of white fl. Syria.

Rubus trifidus, Thunb. (*G. and F.* 1888, p. 273.) Rosaceæ. H. shr. of robust habit, with semi-erect stems, large deeply-divided l., and clusters of showy rose-coloured fl. Japan.

Rubus ursinus, Ch. and Sch. (*H. G.* 1888, p. 561.) H. Stems rather weak and trailing, armed with rather slender prickles. L. with 3 or rarely 5 ovate or elliptic, variously toothed, more or less tomentose leaflets. Fl. white in small corymbs. Fr. black. California.

Ruellia Devosiana, var. **Grilliana,** Piergr. (*B. T. O.* 1888, p. 332.) Acanthaceæ. Garden variety.

Sabal Blackburniana, var. **nobilis,** Lodd. Glaz. (*W. G.* 1888, p. 240.) Palmæ. The above is mentioned at the place quoted, without description.

Saccolabium cerinum, Rchb. f. (*G. C.* 1888, v. 4, p. 206, and *H. G.* 1888, p. 458.) Orchideæ. A rather curious species, with dark, oblong, bilobed l., and racemes of numerous, ascending, waxy, orange fl., with an apricot-coloured spur. Sunda isles.

Salix balsamifera, Barratt. (*G. and F.* 1888, p. 246.) Salicineæ. H. shr. 4–10 ft. high, said to be a very handsome Willow. L. 2–3 in. long, 1–1½ in. broad, acute or acuminate, broadly rounded or subcordate at base, of a rich reddish colour when young, becoming dark green above, paler or glaucous beneath, glabrous. Catkins dense, 1–1½ in. long; males very silky, with rosy scales; females less silky, becoming very lax in fruit, 2 in. or more long, fruit beaked, on long pedicels. Eastern N. America.

Salix chlorophylla, Anders. (*G. and F.* 1888, v. 1, p. 154.) H. Alpine Willow, forming a low spreading bush a few inches high. L. oblong-lanceolate, or obovate-oblong, entire, bright green, silky beneath. Catkins dense. Fr. tomentose. N. America.

Salvia scapiformis, Hance. (*B. M.*, t. 6980; *G. C.* 1888, v. 3, p. 242; *H. G.* 1888, p. 80; and *R. H.* 1888, p. 479.) Labiateæ. H. H. or G. per. herb, with petiolate, broadly ovate, or cordate-oblong, bluntly-toothed, glabrous radical l., and long slender leafless racemes of pale blue fl. in whorls, arising from the rootstock. Formosa.

Sambucus racemosus, var. **arborescens.** (*H. G.* 1888, p. 561.) Caprifoliaceæ. H. A variety with larger l., composed of 7–9 oblong leaflets. Rocky Mountains.

Sarcochilus Hartmanni, Muell. (*B. M.*, t. 7010, and *G. C.* 1888, v. 4, p. 186.) Orchideæ. This is the plant known also as *Thrixspermum Hartmanni*. Queensland.

Saxifraga luteo-purpurea, Lab. (*G. C.* 1888, v. 3, p. 365.) Saxifragaceæ. This is the corrected name of the plant recorded in last year's list, p. 119, as *S. media*, var. *Frederici-Augusti*.

Saxifraga macropetala Kerner. (*G. C.* 1888, v. 3, p. 556.) H. Alpine, like *S. oppositifolia*, with crowded, roundish, or cuneate, obtuse, ciliate, pitted l., and deep lilac fl., resembling those of *S. oppositifolia*. The ovary has a ring-like disk around its base. Tyrol.

Saxifraga oppositifolia, var. **pallida,** For a notice of this form see *G. C.* 1888, v. 3, p. 714.

Saxifraga tombeanensis, Boiss. (*Jard.* 1888, p. 179.) H. Alpine per., something in the way of *S. Burseriana*,

with rosettes of small, erect, ovate-lanceolate, or subulate l., and similar l. on the stems, but glandular-hairy, and bright red glandular-hairy stems, bearing 3–4 white fl. Tyrol.

Scabiosa Victoriæ, Dam. (*W. G.* 1888, p. 437.) Dipsaceæ. Garden hybrid.

Schomburgkia rhionodora, var. **Kimballiana,** Rchb. f. (*G. C.* 1888, v. 3, p. 136; *H. G.* 1888, p. 176; and *O.* 1888, p. 197.) Orchideæ. A variety with the branches and fl. light purple.

Scorodosma fœtidum, Bunge. (*W. G.* 1888, p. 74, f. 13.) Umbelliferæ. This is the same as **Narthex asafœtida,** Falc.

Scuticaria Hadweni, Bth. and Hk. (*O.* 1888, p. 164.) Orchideæ. This is the old *Bifrenaria Hadweni*, Ldl. referred by the authors of the Genera Plantarum to **Scuticaria.**

Selenipedium chlorops, Rchb. f. (*G. C.* 1888, v. 3, p. 584; and *H. G.* 1888, p. 308.) Syn. *Cypripedium chlorops*, Rchb. f. Garden hybrid.

Selenipedium nitidissimum, Rchb. f. (*G. C.* 1888, v. 4, p. 6.) Syn. *Cypripedium nitidissimum.* Garden hybrid.

Senecio elegans pomponicus cupreus. (*W. G.* 1888, p. 437.) Compositæ. Garden variety.

Shortia galacifolia, A. Gray. (*G. and F.* 1888, v. 1, p. 506, and p. 509, f. 80.) Diapensiaceæ. H. per. A pretty and very interesting little plant, with the habit of a Pyrola. L. all radical, broadly elliptic, or roundish, obtuse, crenate, on long stalks. Scapes slender, 3–4 in. long, 1-flowered. Fl. an in. in diam., 5-lobed, with a short funnel-shaped tube. Carolina.

Skimmia Foremanni, Foremann. (*G. C.* 1888, v. 4, pp. 709, 735.) Rutaceæ. Garden hybrid.

Smilax glycophylla, Sm. (*Gfl.* 1888, p. 343–4, f. 74.) Liliaceæ. G. climber, with smooth stems, lanceolate, acuminate 3-nerved l., shining green above, greyish-green beneath, and clusters of globose black berries. Australia.

Smilax pseudochina, L. (*G. and F.* 1888, v. 1, p. 249.) H. Climber with unarmed stems; large ovate, acute l., subcordate, and then shortly cuneate at the attachment of the petiole; and long-stalked umbels of greenish fl., succeeded by black berries. N. America.

Smilax rotundifolia, Linn. (*G. and F.* 1888, v. 1, p. 249.) H. Shr. with tough, climbing, spiny, or unarmed stems, broadly ovate or roundish l., and axillary umbels of small fl. N. America.

Sobralia macrantha, var. **Kienastiana,** Rchb. f. (*G. C.* 1888, v. 4, p. 296; and *H. G.* 1888, p. 504.) Orchideæ. A white flowered variety, with a small yellow mark on the lip.

Solanum ciliatum, var. **macrocarpum,** Carr. (*R. H.* 1888, p. 78, f. 16; *B. T. O.* 1888, p. 117; and *W. G.* 1888, p. 117.) Solanaceæ. S. per. A variety with fr. 1½ in. in diam.

Sphæralcea Emoryi, Torr. (*Gfl.* 1888, p. 73, t. 1266, f. 1; and *H. G.* 1888, p. 175.) Malvaceæ. H. per. 1–2 ft. high. L. petiolate, broadly ovate, pinnatifidly lobed and toothed. Fl. several together from the axils of the l., small, orange-red, on slender pedicels. California.

Spathoglottis Kimballiana. (*G. C.* 1888, v. 4, p. 92 and 93, f. 9; and *G. and F.* 1888, v. 1, pp. 124, 224.) Orchideæ. A garden name for **S. aurea.**

Spathoglottis Viellardi, Rchb. f. (*B. M.* t. 7013; *G. C.* 1888, v. 4, p. 300; and *H. G.* 1888, p. 506.) This is an older name for *S. Augustorum*, Rchb. f.

Spiræa pubescens, Turcz. (*G. and F.* 1888, v. 1, p. 330, f. 52.) Rosaceæ. H. A pretty, free-flowering, dwarf shr., with rather small ovate-oblong, obtuse l., toothed above the middle, puberulous above, densely villous-pubescent beneath; and numerous umbels of white fl., placed in close array on very short lateral shoots, along the slender zigzag branches. North China. N.B. —This should not be confused with *S. pubescens*, Lindl, which is now considered to be the same as **S. dasyantha,** Bunge.

Stachys tuberifera, Naud. (*G. C.* 1887, v. p. ; 1888, v. 3, p. 16, p. 13, f. 1, and p. 211; *R. H.* 1887, p. 290; *G. and F.* 1888, v. 1, p. 4; *Gfl.* 1888, p. 99, and *H. G.* 1888, p. 99.) Labiatæ. H. per. something in the way of *S. arvensis*, producing numerous tubers, used as a vegetable. When first introduced it was thought to be *S. affinis*, Fresen (see Ill. H. 1886, p. 136; and R. H. 1887, p. 266), but was subsequently considered to be distinct by Mr. Naudin. North China, Japan.

Statice eximia, var. **turkestanica,** Regel. (*Gfl.* 1888, p. 194, t. 1270, f. d.–m., and p. 266; *G. C.* 1888, v. 3, p. 564; and *H. G.* 1888, p. 279.) Plumbagineæ. H. per. An ornamental species, with a rosette of lanceolate acute l., 6–8 in. long, by 1½–2 in. broad; and several branching fl.-stems 2–2½ ft. high, with short dense spikes of lilac fl. ending the branches. Turkestan.

Stephanandra incisa, Zabel. (*Gfl.* 1888, p. 537.) Rosaceæ. A synonym for **S. flexuosa.**

Strelitzia Nivenii. (*R. H.* 1888, p. 117.) Scitamineæ. Garden hybrid.

Streptocarpus parviflora, E. Mey. (*G. C.* 1888, v. 3, p. 800.) Gesneraceæ. G. herbaceous per., with a rosette of elongate-oblong, or lanceolate-oblong, obtuse, softly hairy l., and pedunculate few-flowered cymes of tubular fl., about ¾ in. long, and about the same in diam. across the spreading limb of the corolla, which is white with a little yellow on the lower side of the throat, tube pale violet inside and out. S. Africa. N.B.—The plant figured in the Botanical Magazine, t. 6636, as *S. parviflora,* is **S. lutea,** Clarke.

Stropholirion californicum, Torr. (*G. and F.* 1888, v. 1, p. 291.) Liliaceæ. Another name for **Brodiæa volubilis,** Baker.

Stuartia pseudo-cæmellia, Maxim. (*G. C.* 1888, v. 4, p. 188 and 187, f. 22; *G. and F.* 1888, p. 315; *H. G.* 1888, p. 458; and *W. G.* 1888, p. 391.) The corrected name for *S. grandiflora,* Briot.

Styrax obassia, Sieb. and Zucc. (*G. C.* 1888, v. 4, p. 133 and 131, f. 14; *B. T. O.* 1888, p. 347; *H. G.* 1888, p. 457; *R. H.* 1888, p. 410; and *W. G.* 1888, p. 439.) H. shr. of ornamented character. L. elliptic or roundish cuspidate, 3–8 in. long, and as much broad, petiolate, denticulate. Racemes 6–8 in. long, bearing numerous fragrant white fl., 1–1¼ in. in diam. Japan.

Symphoricarpus acutus. (*H. G.* 1888, p. 562.) Caprifoliaceæ. H. shr. with oblong-lanceolate, acute or acuminate, softly tomentulose l., which are acute at the base, and sometimes toothed. This is the **S. nollis** var. **acutus,** A. Gray. N. W. America.

Symphoricarpus occidentalis, var. **Heyeri,** Dieck. (*H. G.* 1888, p. 562.) H. shr. A form with rhomboid l. of firm texture, with prominent veins, and pretty, rosy fl. Colorado.

Symphyandra Hoffmanni, Pantozsek. (*W. G.* 1884, p. 352, f. 53; *G. C.* 1888, p. 760, f. 107.) Campanulaceæ. H. per allied to *S. pendula,* but more robust and more floriferous, 1–2 ft. high, softly hairy. L. lanceolate acute, serrate. Fl. white, drooping, 1–1⅓ in. long; the calyx-lobes ovate-lanceolate, acute, entire. Bosnia.

Syringa amurensis, Rupr. (*G. and F.* 1888, v. 1, pp. 222, 453; and *W. G.* 1888, p. 274.) Oleaceæ. H. shr. 6–8 ft. high. L. ovate or oblong, obtuse, or acuminate, contracted into a long channelled petiole. Fl. white, in a dense panicle, corolla tube included in the short calyx. Mandchuria.

Syringa emodi, var. **rosea,** Cornu. (*R. H.* 1888, p. 492, with pl.) Oleaceæ. A variety with rosy-lilac fl. China. See **S. villosa.**

Syringa japonica, Maxim. (*G. and F.* 1888, v. 1, p. 222.) H. tree. L. broadly ovate acuminate, villous-pubescent beneath. Panicle many flowered. Calyx denticulate, pubescent, as long as the corolla-tube.

Syringa pekinensis, Rupr. (*G. and F.* 1888, v. 1, pp. 222, 453.) H. A small tree with long, graceful, flexuous branches. L. ovate, on deltoid, obtuse or acuminate, on long slender petioles, dark green, paler beneath. Panicle dense. Fl. white, with the corolla-tube scarcely longer than the obscurely denticulate calyx. China.

Syringa pubescens, Turcz. (*G. and F.* 1888, v. 1, p. 414, f. 67.) H. A beautiful free-flowering shr. of compact habit, 3–5 ft. high, with ascending slender branches; rather small elliptic-ovate acute l., 1½–2 in. long, pale beneath, with a pubescent midrib, and panicles of long-tubed, pale rose coloured fl., that are very fragrant. North China.

Syringa villosa, Vahl. (*G. and F.* 1888, v. 1, p. 222, and p. 520, f. 83.) H. shr., very similar to *S. emodi,* and *S. Josikæa,* but differing in having the underside of the l. clothed with long white hairs. At the last quoted page it states that this appears to be the same as *S. emodi* var. *rosea* of the R. H. China.

Talisia princeps, Oliver. (*G. C.* 1888, v. 3, p. 806.) Sapindaceæ. S. tree. This is the ornamental tree known in gardens as *Theophrasta pinnata, Brownea princeps,* and *B. erecta.* It has an unbranched stem, with a crown of spreading pinnate l. about 6 ft. long, and large branching panicles of small whitish fl. Venezuela.

Thunia candidissima, Rchb. f. (*G. C.* 1888, v. 4, p. 34; and *H. G.* 1888, p. 397.) Orchideæ. See **Phaius candidissimus.**

Thunia Marshalliana, vars. **triloba** and **purpurata,** Rchb. f. (*G. C.* 1888, v. 4, p. 62; and *H. G.* 1888, p. 397.) See **Phaius Marshalliana.**

Thunia nivalis. [Prof. Reichenbach mentions this species under *T. Marshalliana* var. *triloba,* in *G. C.* 1888, v. 4, p. 62. But I have been unable to find where it is described.—*N. E. Br.*]

Thymus serpyllum, var. **atropurpureus,** Backhouse. (*G. C.* 1888, v. 3, p. 650; and *W. G.* 1888, p. 275.) Labiatæ. H. alpine variety, of a dark purple colour. North of England. See also p. 714 of the same work, where a var. **coccineus,** Backh., is mentioned.

Thyrsacanthus coccineus, Regel. (*Gfl.* 1888, p. 128.) Acanthaceæ. A synonym of **T. Lemairianus,** Nees.

Thyrsacanthus Lemairianus, Nees. (*Gfl.* 1888, p. 128.) A shr. This is the corrected name for the plant known in gardens as *Eranthemum coccinea,* Syn. *Thyrsacanthus coccineus,* Regel.

Tigridia Pringlei, S. Wats. (*G. and F.* 1888, p. 388, f. 61.) Iridaceæ. H. H. bulb. Much like the familiar *T. pavonia,* and quite as showy, chiefly differing in the pet. being broadly cordate or reniform at the base, with a narrower, small, triangular-ovate, acute blade. Sep. bright scarlet-red, the base blotched with crimson, with a border of orange. Pet. with the base blotched with crimson, having a well defined brownish margin, the blade orange, tinged with scarlet, not spotted. Chihuahua.

Tilia europæa, var. **pyramidalis aurea.** (*W. G.* 1888, p. 164.) Tiliaceæ. Garden variety.

Tillandsia Alberti, André. (*R. H.* 1888, p. 577.) Bromeliacæ. Garden hybrid.

Trias picta, Rolfe. (*G. C.* 1888, v. 3, p. 488.) Orchideæ. A small orchid with 4-angled bulbs, narrow ovate acuminate fleshy l., and fleshy fl., ¾ in. in diam, honey-coloured, densely spotted with reddish-purple. Burmah.

Trichopilia Lehmanni, Regel. (*Gfl.* 1888, p. 355, t. 1276, f. 2; and *H. G.* 1888, p. 401.) Orchideæ. Something in the way of *T. fragrans,* but with a 1-flowered peduncle. Bulb ovate, compressed. L. solitary oblong-lanceolate obtuse. Scape 2–3 in long, bracteate. Ovary white. Sep. and pet. linear-lanceolate acute, 1½ in. long. Lip with a large oblong front lobe. Fl. white, with a yellow spot in the throat of the lip.

Tritoma Canari, Carr. (*R. H.* 1888, p. 295.) Liliaceæ, H. per. A yellow-flowered form of **Kniphofia aloides.**

Tulipa Greigi, var. **æstuans, aurea, aurea opidabilis,** (? an error for **spectabilis**), **aurea superba, aurea zonata, carminea, compta, imperialis, parviflora, parviflora amœna, parviflora aurea, parviflora chrysantha, parviflora sulphurea, picta, Victoriæ,** Damman. (*W. G.* 1888, pp. 333–334.) Liliaceæ, Garden varieties.

Tulipa libanotica, Regel. (*Gfl.* 1888, p. 126.) H. Tulip allied to *T. Boissieri* and *T. linifolia,* with flaccid linear l. wavy and ciliate on the margins. Scape glabrous. Fl. purple with an elongate blackish spot at the base of the oblanceolate segments. Anthers shorter than the filaments.

Vanda lamellata, var. **Boxallii superba.** (*L.* v. 3, p. 83, pl. 136.) A fine variety, with the upper sep. and pet. white, spotted at the apex with claret colour; the later sep. and lip. for the greater part claret-coloured edged and flaked with white. Syn. *V. Superba,* Linden.

Vanda superba, Linden. (*L.* v. 3, p. 83, pl. 136; and *G. C.* 1888, v. 3, p. 806.) See **V. lamellata** var. **Boxallii superba.**

Verminiaria denudata. (*W. G.* 1888, p. 272.) Lequminosæ. A misprint for **Viminaria denudata,** Sm.

Veronica cupressoides, Hook f. var. **variabilis** N. E. Br. (*G. C.* 1888, v. 3, p. 20, f. 5 and 7.) Scrophulariaceæ. The corrected name for the plant cultivated as *V. salicornioides.* New Zealand.

Veronica Godefroyana, Carr. (*R. H.* 1888, p. 455; *Jard.* 1888, p. 249; and *W. G.* 1888, p. 470. H. evergreen shrub, forming a spherical bush 1½–3 ft. high. L. ½ in. long, ¼ broad, oblong obtuse, narrowed at the base, thick in texture, concave, glaucous green. Fl. in axillary compact racemes, small, very numerous, white. New Zealand. [This seems to be very like **V. carnosula,** Hk. f.—*N. E. B.*]

Vitis Berlandieri, Planch. (*B. T. O.* 1888, p. 156.) Ampelideæ. H. H. or G. Vine with pentagonal stems, covered with a crisp floccose pubescence; cordate-orbicular, more or less 3-lobed, toothed l.; and panicles of blackish-violet globose berries. Texas, New Mexico.

Vitis indivisa, Willd. (*G. and F.* 1888, v. 1, p. 297.) H. an ornamental climber, suitable for covering trelisses or walls. L. cordate, serrate, 4–5 in. long. Fl. in small loose panicles. Berries about the size of a pea. Eastern North America.

Vitis reniformis, var. **violacea,** Carr. (*R. H.* 1888, p. 536, f. 132.) H. dicœcious vine, with very long slender stems. L. large, roundish-reniform, obtuse, crenulate, dark green above paler beneath, strong reticulate, the petiole and veins cottony-hairy. Male fl. in small panicles, on slender dark red peduncles. China.

Vitis Romaneti, Carr. (*R. H.* 1888, p. 536 p. 131.) H. diœcious Vine. L. very variable, cordate to 5-lobed, acute, toothed, bright green above, silvery white beneath. Male flowers in freely produced, compact panicles. China.

Vriesea fulgida, Duval. (*Ill. H.* v. 35, p. 87, pl. 67.) Bromeliaceæ. Garden hybrid.

Vriesea imperialis, Carr. (*R. H.* 1888, p. 58.) A noble Bromeliad, with a very stout stem, about 18 and 20 in. thick, bearing a rosette 4½ ft. in diam., of bright green l., which are ascending and slightly recurved, channelled down the face, narrowed gradually from the base to the spine-pointed apex. Fl. unknown. Brazil. [According to Mr. Baker this is one of the many forms of **Tillandsia regina,** Vell. —*N. E. B.*]

Vriesea pulverulenta var. **lineata,** Carr. (*R. H.* 1888, p. 89, f. 20; and *W. G.* 1888, p. 156.) A grand and very ornamental plant, the rosette of l. measuring 6–7 ft. in diam. L. ascending with recurved tips, gradually narrowing from a very broad base to the acute apex; green, with a powdery meal; and longitudinally striped with yellow. Fl. unknown. Brazil.

Vriesea Wittmackiana, Kittel. (*Gfl.* 1888, pp. 287 and 553, t. 1283; *G. C.* 1888, v. 4, p. 565; and *H. G.* 1888, p. 554.) Garden hybrid.

Warrea bidentata, Lindl. (*G. C.* 1888, v. 3, p. 104.) Orchideæ. Allied to *W. tricolor*, but with a longer and narrower lip, having a sharp basal keel, and the disk covered with seriate callosities.

Zinnia linearis, Benth. (*G. and F.* 1888, p. 270.) Compositæ. H. annual. A pretty little species, of dwarf bushy habit, with linear or linear-lanceolate l., and bright orange-yellow fl. Mexico.

Zygopetalum, brachypetalum, var. **stenopetalum,** Regel. (*Gfl.* 1888, p. 384, t. 1277; and *H. G.* 1888, p. 401.) Orchideæ. A variety with narrow acute sep. and pet. of a purple-brown, marked with green. Lip. violaceous with a whitish margin; the basal crest with about 5 crenations.

Zygopetalum citrinum, Nicholson. (*G. C.* 1888, v. 4., p. 94.) This is *Promenæa citrina,* Don, now referred to *Zygopetalum.*

Zygopetalum hemixanthum, Rchb. f. (*G. C.* 1888, v. 4, p. 206.) Allied to *Z. Lalindei*, but distinct in colour, and with numerous tubercles and processes at the base of the crest of keels. Sep. and pet. white. Lip yellow, the crest darker. *Syn. Bolleæ hemixantha,* Rchb. f. New Granada.

Zygopetalum Sanderianum, Regel. (*Gfl.* 1883, p. 657, t. 1287.) A distinct looking plant, with a slender creeping stem, bearing ovoid bulbs at distant intervals. L. lanceolate acute. Scape few flowered. Sep. and pet. lanceolate acute, green, speckled with brown at the base. Lip obovate, very obtuse, slightly crenate, with a triangular, crenate crest at the base, blue-purple.

Zygopetalum Wendlandi, Rchb. f. (*Gfl.* 1888, p. 105, t. 1267; *G. C.* 1888, v. 4, p. 509; *H. G.* 1888, p. 175; and *R.* v. 2, p. 9, t. 53.) A fine species, with narrow lanceolate acute l., and solitary fl. about 2½ in. in expanse, on scapes 3–4 in. long. Sep. and pet. lanceolate acute, undulately curved, light greenish. Lip angled at the base on each side, constricted at the middle, then expanded into a large cordate-reniform, wavy front lobe, which is strongly revolute at the tip; white, with the semicircular, many-rayed crest at the base, and the disk in front of it violaceous. Syn. *Bollea Wendlandiana* (*G. and F.* 1888, v. 1, p. 315.) Costa Rica.

M.S. del, J.N. Fitch lith.

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